2016

Community College Faculty Dispositions Towards Blended Learning

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by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in
Computing Technology in Education

College of Engineering and Computing
Nova Southeastern University

2016

We hereby certify that this dissertation, submitted by Robin Hill, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the dissertation requirements for the degree of Doctor of Philosophy.

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2016

An Abstract of a Dissertation Submitted to Nova Southeastern University
in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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May 2016

Community colleges are being encouraged to find and provide access to higher education by offering more flexible course delivery methods to meet the needs of their diverse student body. At the same time, these institutions must retain their quality of instruction, accountability for learning outcomes, and institutional obligations. Blended learning, where students attend class both on campus and online, is promoted as one solution for attaining such goals. Among the four-year undergraduate population, blended learning has been shown to support student success, meet diverse learning styles, and meet institutional obligations; however, research within the community college population is limited. In particular, faculty members' perspectives and challenges for teaching blended learning have not been well documented.

The goal was to understand the dispositions of the community college faculty towards blended learning. An exploratory, qualitative case study design was used to gain an in-depth understanding of this phenomenon within the real world context of the community college. An open-ended survey and semi-structured interview were used to collect data from faculty members at Suffolk County Community College in NY. In addition, course outlines, interview field notes, and archived course data were also collected. There were 26 survey participants from three campuses, of which 10 were interviewed. Survey participant self-reported gender was 17 females, 8 males and 1 prefer not to answer; faculty rank ranged from instructor to adjunct professor. Data were analyzed using a structured descriptive systematic approach.

The results provided a composite view of community college faculty member's dispositions towards blended learning, which identified fifteen themes as: Definition of Blended Learning, Rationale for Blended Learning Environment, Blended Learning Design Schedule, Degree of Contact, Multidimensional Role, Interactions, Technology Skill Required, Perceived Technology Skill, Blended Learning What Works and Doesn't Work, Recommendations, What Works and Doesn't Work for Community College Blended Learning Students, Flexible Schedules and Learning Environment. Findings also guided recommendations for teaching blended learning courses within this community college and an outline for approaching blended learning implementation.

Acknowledgements

From the beginning there were many people who contributed to this enormous undertaking and without them I would not have completed this work. Their support will never be forgotten.

First and foremost, I am eternally grateful to committee chair Dr. Martha (Marti) Snyder for her invaluable insights, patience, and guidance. I will miss her acumen and our phone conversations. To committee member, Dr. Laurie Dringus, thank you so much for your attention to detail, useful resources and all of your recommendations. To committee member, Dr. Ling Wang, thank you for your assistance with the IRB procedure, your suggestions and for sharing your knowledge of research. Each of your recommendations were vital to the successful completion of this work.

I'd like to thank all of the faculty members from Suffolk County Community College who participated in this study. Without them, this study would not have been possible. A sincere thanks to the external reviewers, Dr. Alex Atwood and Dean Troy J. Hahn. Their time and input were greatly appreciated. Thanks also to Suffolk County Community College for allowing me to conduct this study.

Lastly, to the people who have been most supportive in my endeavor: my dear sister Brenda Parasimo, my precious mother Connie Barber, my cherished niece Elizabeth Barcellona, my fabulous sister Linda Pavone and my treasured friends Debbie Staples-Waarst, Gina Sinkevich, Debbie Terracciano, and David Rivera. They have all contributed to this journey, and for that I thank them.

Throughout this journey and life, I have lost loved ones and family members, yet their everlasting encouragement inspired me to persevere: my father Bruce (Dude) Barber, my maternal grandparents Billie and Mike De Lieto, my in-laws Philip and Helen Hill, cousin Jill Haymes-Youngerman, and brother-in-law Lou Parasimo. You are all greatly missed.

Above all, this dissertation is dedicated to my husband, Keith. Thank you for enduring this long and winding road. You are a true inspiration. Without your gentle nature and dedication, I would not be here today. "…If the sun refused to shine, I would still be loving you. When mountains crumble to the sea, there will still be you and me…" (Robert Plant, Led Zeppelin, 1969).

Table of Contents

List of Tables

Tables

Chapter 1

Introduction

Background

The later part of the 19th century started the industrial revolution creating a global economy. Within four decades (about the beginning of the 20th century) local and national government leaders recognized that only a skilled workforce would ensure the United States' economic growth. However, at that time only 25% of high school graduates chose to attend college. A solution was the junior or community college (Historical Information, 2014). The first community college was based in Joliette Illinois' high school (Historical Information, 2014). Ironically, about one-hundred years later or near the beginning of the 21st century political leaders continued their emphasis on enrolling a higher percentage of high school graduates in post-secondary institutions to strengthen economic growth in a global economy. A solution for making that happen is blended learning.

Blended learning combines face-to-face and online learning. The blend of these two modes of instruction can happen at the activity, course, and program levels (Graham, 2009). The origins of blended learning can be aligned with the history of technology-based training starting in 1960 when computers became more prevalent in the corporate world (Bersin, 2004). This type of learning was known as main-frame computer-based training. The next phase started in the 1980's and continued through the 1990's by incorporating "satellite of ground based video distance learning" (p. 1). Also, developed

in the 1980s and 1990s was the PC, CD-Rom, computer based training (CBT) delivery methods, websites, and learning management systems (LMS). It is further reported that in the year 1998, LMSs were developed providing virtual classrooms to all types of educational environments (Bersin, 2004). The Aviation Industry Computer Based Training Committee (AICC) created a standard known as the AICC for the development, evaluation, and delivery of digital educational content to provide modular reusable materials (Boggs, 2013). Online asynchronous (interacting at a different time), synchronous learning (meeting either face-to-face or online at the same time), or a combination of such modalities with instructor led training became known as blended/hybrid learning in both the corporate and educational research knowledge bases.

Today it is more common in higher education for blended learning to take place through the use of learning management systems such as Blackboard, Desire 2 Learn, and Moodle, as opposed to personal websites that were popular in the late 1990s. These systems are supported by the institutions that offer distance education classes online and include blended learning courses. The main objectives of blended learning in higher education include giving students more flexible schedules (reduced seat-time), allowing additional time for students to review and learn content, and using different types of learning activities thereby addressing students' diverse learning styles (Diaz & Brown, 2010; Millichap & Vogt, 2012). However, the teaching pedagogy changes and so does the faculty members' teaching approach when using a blended learning method. In addition to recreating lessons to reflect a learner-centered approach, they also take on the task of learning the technology and are often required to assist students with troubleshooting the technology (Ocak, 2011).

These and other concerns about teaching blended learning were reported by Ocak (2011) in an exploratory case study aimed to uncover the problems faculty face when teaching blended courses. Ocak interviewed 117 faculty members from four large state universities in Turkey. Eighty interviews were conducted face-to-face and 37 interviews were conducted via email. Interview transcripts were analyzed using an inductive content analysis. Three categories of faculty concerns were found including instructional processes, community concerns, and technical issues. Ocak identified eight themes from these three categories including complexity of the instruction; lack of planning and organization; lack of effective communication; need for more time; lack of institutional support; changing roles; difficulty of adoption to new technologies; and lack of electronic means. Ocak concluded that teaching in a blended learning environment is not a simple transition. Faculty members enter the blended learning arena with their unique teaching styles, which compounds the way blended learning is defined and implemented across higher education. Ocak recommended that additional studies that focus on faculty members' perspectives of blended learning be conducted in different contexts.

Problem Statement

The problem is that there are few studies that address the faculty disposition regarding the implementation of blended learning courses (Drysdale, Graham, Spring, & Halverson, 2013; Halverson, Graham, Spring, Drysdale & Henrie, 2014; Ocak, 2011), and even fewer studies that directly address the community college faculty members' blended learning experience. According to Helms (2012) more blended learning research is needed in the community college.

Drysdale, et al. (2013, p. 98) report the need for understanding the faculty disposition of implementing blended learning because investigating the "entire learning ecosystem" is the only way to understand the "…potential and limitations of this field." They support their argument by quoting Moskal, Dzuiban and Hartman (2010, p. 62) "students and faculty must operate in resonance. Instructors are unlikely to have a positive experience online without positive and engaged clientele." In addition, because research within the community college population is limited (Helms, 2012) it is more difficult to improve upon course design, program offerings, best practices, faculty professional development, student success, and strategic planning.

Goal and Research Questions

The goal of this exploratory case study was to understand the community college faculty member's dispositions towards blended learning. This study extends Ocak's (2011) work by investigating not only what problems faculty face but also investigate how and why faculty embrace blended learning. By providing detailed information about faculty members' dispositions of blended learning, a more thorough understanding of the circumstantial conditions that affect faculty who teach blended courses will be developed. By gaining a deep and context-specific description of these faculty experiences, recommendations of best practices for implementing blended learning within the community college will be developed and used for professional development curriculum. Therefore, the overarching question is:

What is the disposition of community college faculty towards blended learning?

Subquestions include:

1. How do faculty describe blended learning?

2. How do faculty implement blended learning in the courses they teach?
3. How do faculty perceive their roles in the context of a blended learning course?
4. What problems do faculty face when implementing blended learning?
5. What aspects of blended learning do faculty embrace and why?

Relevance and Significance

To understand the trend of blended learning research, Drysdale, Graham, Spring, and Halverson (2013) conducted a meta-analysis on graduate theses and dissertations over the past decade. More recently, Halverson, Graham, Spring, Drysdale and Henrie (2014) expanded upon their research adopting the methods of thematic analysis of the most highly cited articles and books published within the in the first decade of blended learning research to determine which research methodologies were being used, the research questions being discussed and which theoretical frameworks were being referenced. Helms (2012) conducted a broad scoped review of the literature. Each searched the literature using "hybrid and blended" as keywords. Drysdale, et al. (2013) reviewed approximately 200 empirical studies. The authors recommended areas for further research including synchronous (interacting at the same time) activities, learner-content interaction, design, evaluation, environment, faculty dispositions, why outcomes are improved, and theories be developed specifically for blended learning. Halverson, et al. (2014) identified a gap 'faculty perceptions' within the dispositions category. There was also a need for more blended learning research in two-year post-secondary institutions based upon the outcome of Helms' (2012) review of the literature.

Although reported as well-known and effective (De George-Walker & Keeffe, 2010; Demirer & Sahin, 2013; Graham, Woodfield & Harrison, 2013) blended learning had an insufficient number of unique theories and models available to define it, provide a prescription for balance, and direct its practice (Drysdale, et al., 2013; Yoon & Lim, 2007; Wang, Han & Yang, 2015). Some researchers implied that this problem was directly related to the many distinctions of and multiple labels for blended learning (De George-Walker, et al., 2010; Graham, 2013; Helms, 2012; Sharma, 2010; Wang, et al., 2015; Wold, 2013).

The range of the problem extended across higher education. Instructional designers, administrators, faculty and students of higher education programs were affected by the lack of theories, models, and a distinct definition for the design and implementation of effective blended learning environments (Graham, 2013; Helms, 2012; Wang et al., 2015). Theory building provides a way of developing knowledge, common language and application. Regularly accepted theories and models establish common language and process within a context area thereby bringing unity and clarity to their applications (Graham, Henrie & Gibbons, 2014). Researchers had implied that the lack of distinct theories in blended learning stems from the lifespan of its domain (Drysdale, et al., 2013; Graham, et al., 2014). This case study that investigated the real world experience of faculty members' dispositions for implementing blended learning establishes a foundation for contributing to such a theory.

Barriers and Issues

The policy of open enrollment within the community college itself created the issue of underprepared students. It was reported that within the SUNY system 70% of the

community college students were in need of remedial courses in English, Reading, and Mathematics (SUNY, 2012). Student demographics in both traditional and adult populations were showing the need for more flexible scheduling to accommodate their lifestyles, and institutions were in need of solutions for student access, and financial shortfalls (Millichap & Vogt, 2012). However, if students were not meeting admission standards in reading and writing, how did they participate in distance education courses? If asynchronous (fully online) courses were showing lower retention rates, would blended learning be a solution? If blended learning showed promise where retention rates were about the same in the traditional classroom and the blended learning environment (Bleffert-Schmidt, 2011), one is left to ask how and why? What was the blended learning experience within a community college, from the lived experience of faculty? What was the faculty members' disposition of implementing blended learning? What experiences developed their dispositions? What, how and why did blended learning work? When did it not work for faculty members? What did faculty members think about why it worked or didn't work for community college students?

This study took place at Suffolk County Community College, a large commuter college, located in New York. There were approximately 2000 faculty members were listed on staff. Of those approximately 450 are employed full-time, and about 425 are full-time teaching faculty. Therefore, about 1500 faculty are adjuncts. There were about 30 blended learning courses offered each semester. This number has not increased in five years. The results of this study should assist with determining why the number has not increased. The outcomes of this study should be used to develop professional development curriculum for blended learning.

Limitations and Delimitations

Limitations

The following factors were limitations beyond the researcher's control, which might have impacted the validity of the results:

- The author teaches and is a coordinator for instructional design. Having experience teaching blended courses could create bias. Steps were taken to address the potential of researcher bias.
- "…Case studies like experiments, are generalizable to theoretical propositions and not to populations or universes" (Yin, 2014, p. 21). The findings of this study may not apply to four-year colleges, universities, or corporate and government training because the opinions and definitions of CC faculty related to blended learning may differ from those cultures. Therefore, additional research at other institutions would be needed to verify whether the findings from this study would generalize elsewhere (Simon & Goes, 2013).
- Interviewees might have answered questions based upon what they thought the interviewer wanted to hear. This is also known as 'reflexivity' (Yin, 2014, p. 106). Therefore, the researcher sought out other resources of evidence to support the participant's insights (Yin, 2014).

Delimitations

The following factors are limitations beyond the researcher's control, which could impact the validity of the results:

The following factors are delimitations, which have been purposefully implemented to manage the study scope:

- According to Yin (2014, p. 19), "…as a research endeavor, the case study has been viewed as a less desirable form of inquiry than either experiment or a survey" (p. 19). "Perhaps the greatest concern has arisen over a presumed need for greater rigor in doing case study research." To address this delimitation, he recommended the use of a systematic approach to direct and influence data collection, findings and conclusions. It was worth noting he further stated this was the case when using any research methodology (p. 20).
- To keep the sample manageable, the study was bound to SCCC's distance education program faculty members who have either taught or were teaching blended learning courses.
- Qualitative data obtained from interviews, surveys, documents and artifacts were collected.
- The study was conducted within one semester to keep the time-frame manageable.
- The goal was to solicit 3 faculty participants from each campus to keep the study manageable.

Definitions of Terms

Asynchronous	Instruction and student participation occurs completely online, there are no face-to-face class meetings (Author).
Blended learning	Combines face-to-face and online learning activities and pedagogy. The blend of these two modes of instruction can happen at the

	activity, course, program and institution levels (Graham, 2009).
Hybrid learning	Another term used for blended learning (Helms, 2012).
SCCC's blended learning	Traditional instructional seat-time is reduced by any percentage and the balance of instructional seat-time is delivered online. If a course meets once and the balance is taught online, it is considered a BL course. (SCCC DEC, 2015).
Structured interview	Same set of open-ended questions.
Structured survey	Same set of open-ended questions.
Synchronous	Activity that takes place online usually using meeting software, participants meet at a designated time from any location using a computer and the Internet (Author).

Acronyms

ASL	Asynchronous Learning Tools
AACC	American Association of Community College
AICC	Aviation Industry Computer Based Training Committee
BL	Blended Learning
CC	Community College
CoI	Community of Inquiry
DE	Distance Education

IRB	Institutional Review Board
IQ	Interview Question
LMS	Learning Management System
NSU	Nova Southeastern University
RQ	Research Question
SCCC	Suffolk County Community College
SQ	Survey Question
SUNY	State University of New York
TPCK	Technological Pedagogical Content Knowledge

Summary

As blended learning became more commonplace in colleges and universities, there was a need to understand how various stakeholders were adopting this delivery method. Ocak (2011) conducted an extensive study focusing on problems that faculty experienced relating to blended learning. As Ocak reported, faculty concerns ranged from lack of institutional support, to changing roles, to the adoption of new technologies. Ocak suggested future research should focus on faculty experiences with blended learning in other contexts. Helms (2012) suggested more blended learning research was needed in the community college, specifically.

The focus of this study was on community college faculty dispositions toward blended learning. Chapter 1 presented the background and rationale for this goal including the research question and subquestions that guided the investigation. The relevance of this study and significance were described, as well as, the limitations and delimitations that further communicate the scope of this work. Chapter 1 concludes with

a list of definitions and acronyms that were used throughout this report. The next chapter includes an in-depth review of the literature.

Chapter 2

Literature Review

The following review of the literature highlights research literature in key areas that were relevant to exploratory case research bound to the faculty disposition for implementing blended learning within a community college setting. These areas included: the community college; a brief history of blended learning in higher education; definition of theory, framework, and model; theories and frameworks for distance education and blended learning; faculty blended learning experience and summary.

The Community College

President Obama had challenged the nations' community colleges to educate an additional five million students with degrees, certificates, or other credentials by 2020 (American Association of Community College, 2012). In response to this challenge, the American Association of Community College's (AACC) (2012) had created a two-phased plan called the 21st Century Initiative. Phase one of the report addressed student access to community colleges. It is reported that 21% of full-time students were employed full-time, and 59% were employed part-time. In addition, 40% of part-time students were employed full-time, and 47% were employed part-time. To expand the access of higher education to communities throughout the nation, it was recommended that online learning programs be utilized to establish alternate models for completing skills based credentials within the community college (AACC, 2012).

One challenge for online learning within the community college was open enrollment and the developmental student. The AACC (2012) reported that nationwide 60% of their student body was enrolled in at least one developmental course. And according to the State University of New York (SUNY) (2012) report 70% of their community college students were enrolled in at least one developmental course. This is problematic for fully online learners. It is not very realistic to expect students with remedial reading skills to take an online asynchronous course and be successful. However, a blended learning environment had been shown to improve student success across institutions (Millichap & Vogt, 2012; Shivetts, 2011).

Bleffert-Schmidt (2011), researched the blended learning experience of community college students in the SUNY system to discover its efficacy. Investigating if blended learning was effective and if it was "…worth pursuing…" within a community college (p. 4). Bleffert-Schmidt (2011) also sought to discover if there was equal value in blended learning programs within a community college as when compared to what had been reported by four-year colleges and universities. The goal of her research was to document the ways in which the blended learning environment changed the learning experience. One of the reported findings included showing the difference in student completion rates between the blended learning environment, and the face-to-face environment, and blended versus the online learning environment. The results showed no significant difference between blended learning and face-to-face learning environments. However, a comparison of blended to fully online learning environments showed student course completion rates increased by 20% in the blended learning environment.

History of Blended Learning in Higher Education

Access to higher education was reported as being the most common reason for students enrolling in distance education courses and programs (Bolliger & Wasilik, 2009; Hannay & Newvine, 2006; Herbert, 2006; Jones & Lau, 2010). Over the past decade there had been an increase of traditional and adult students enrolling in post-secondary online courses (Allen & Seaman, 2013). The adult student had different demographics when compared to the traditional postsecondary student; these specific differences were reported as being their expectations, lifestyles, and educational needs (Lao & Gonzales, 2005; Hannay, et al., 2006, Herbert, 2006; Holder, 2007). However, recently the traditional community college student demographic was reported to overlap in many areas with that of the non-traditional student (Mullin, 2012), making their needs similar.

Administrators of institutions in higher education believed that distance education programs assisted through expanded access to higher education, increased enrollments for both traditional and adult students, and controlled costs (Hannay, et al., 2006; Herbert, 2006; Holder, 2007; Jones, et al., 2010; Morris & Finnegan, 2009). Köse (2010, p. 2796) identified additional advantages as:

- *The combination of different education techniques and technologies*. Can improve students' academic achievements.
- *Blended learning offers diversity.* For students with diverse learning styles and academic levels.
- *Various educational techniques*. Attracts more students' attention to content.
- *Unlimited access*. Students have unlimited access to course materials.

Although other advantages existed, affordability of technology was viewed as the primary reason for the increased online programs and enrollments (Herbert, 2006).

Disadvantages of blended learning were reported as aligning blended learning with institutional goals and priorities, faculty's resistance of change combined with the lack of organizational policy, structure, and experience (Power, 2008; Vaughan, 2007). Research showed that instructors resisted teaching blended courses because building, designing, and teaching a blended course was time consuming (Collopy & Arnold, 2009; De George-Walker & Keeffe, 2010; So & Bonk & Graham, 2006). Reported obstacles for students learning online included time management, independent learning, and using technology (Collopy, et al., 2009; De George-Walker, et al., 2010; Vaughan, 2007).

Definition of Theory, Framework, and Model

Definitions provided an understanding of why theories, frameworks, and models in blended learning were important to the instructional technology field. A theory is a set of associated concepts and principles related to a phenomenon. Theories are formulated to explain, predict, and realize a phenomenon. Frameworks outlined the investigation process yet they did not supply explanations for, or predictions of, behavior and outcomes (Sherif, 2013). Models made exact suppositions about a limited set of factors and variables. Theories were combined with models, and connected to frameworks to create a foundation for the researcher to follow when building scientific studies for their knowledge base (Sherif, 2013).

Theories and Frameworks for Distance Education

Researchers have worked towards establishing models and frameworks for blended learning in higher education for approximately two decades (Graham, 2009; Gedik, et al.,

2013; Wang, Han & Yang, 2015). To answer what and how to blend, some had investigated course design, course facilitation, learning outcomes, motivating students, design frameworks, faculty professional development, and other elements thought to influence the blended learning experience (Hoffman, 2006; Huang, Ma & Zhang, 2008; Picciano, Dziuban & Graham, 2014). Of course, thorough examples of best practices and good empirical case studies were important for building an understanding of blended learning. Likewise, they were simply the foremost measures towards the maturation of integrated theoretical and abstract frameworks that provided us with the development of distinguished themes and concepts used to apply across various cases and models of practice.

According to Graham, Henrie, and Gibbons (2014), there were four distance education theoretical concepts/frameworks that influenced blended learning: Transactional Distance theory (Moore, 1993), the Community of Inquiry (CoI) framework (Garrison, Anderson & Archer, 2000), the Technological Pedagogical Content Knowledge (TPCK) framework (Mishra & Koehler, 2006), and the Equivalency theory (Simonson, 1999).

Transactional Distance Theory

Moore (1993) reported "The first attempt in English to define distance education and to articulate a theory appeared in 1972" (p. 22). Over time the theory was called "Transactional Distance" (p. 22). Moore expanded on this theory in 1993. In short, distance education/transactional distance theory was defined as a pedagogical concept that allowed for instructor to student relationships over different geographical locations,

separate time zones, and the removal of the physical learning environment (Moore, 1993). Transactional distance theory was associated with blended learning because online education was a descendant of distance education and blended learning was a direct descendant of online education.

Community of Inquiry (CoI) Framework

The CoI framework (Garrison, et al., 2000) was founded in John Dewey's (1933) notion of practical inquiry. Garrison et al., (2000) developed the conceptual framework to address computer-mediated communication in higher education. The CoI framework consisted of three elements including cognitive presence, social presence and teaching presence. Cognitive presence was defined as the degree to which a member within a community of inquiry was able to build meaning by ongoing communication, and was posited as the most important element because it was fundamental to critical thinking. Social presence was defined as the degree to which a member within a community of inquiry was able to present his/her characteristics as an individual and this element acted to support cognitive presence. The third element, teaching presence, was defined in two parts as 1) the structure of the entire learning experience and 2) all members of the community acted as facilitators to support cognitive and social presence.

Technological Pedagogical Content Knowledge Framework

Mishra and Koehler (2006) investigated what instructors needed to learn to use technology effectively in practice. The study was conducted over five years, participants were faculty of higher education and teachers from elementary and secondary educational institutions. The study focused on "…teachers' development toward rich uses of technology while simultaneously helping teachers – both K-12 teachers and university

faculty – develop their teaching with technology" (p. 1019). Based upon their findings, they developed a framework premised on the understanding that "…teaching is a highly complex activity that draws on many kinds of knowledge" (p. 1020). Building upon Shulman's (1986) pedagogical content knowledge (PCK) framework, the element of technology was added to create technological pedagogical content knowledge (TPCK). A Venn diagram was used to display where the four elements overlapped that lead to four additional types of interrelated knowledge labeled as pedagogical content knowledge, technological pedagogical knowledge, technological pedagogical content knowledge, and technological content knowledge. Clearly this framework was valuable for integrating technology in the traditional classroom as well as in an online environment.

Equivalency Theory

As advances in telecommunication systems developed Simonson (1999) identified a need to expand upon existing distance education theories. Equivalency theory was built upon the notion that distance education should be developed on the basis of the "…equivalency of learning experiences" (p. 70). The key elements of equivalency theory were equivalency, learning experience, appropriate application, students, and outcomes.

Simonson (1999) defined equivalency as the instructor designing learning activities of equal value for on-campus and online students. Learning experiences were defined as making the aggregate learning experience of each learner equivalent for both on-campus and online students. Appropriate application referred to the consideration of the students' access to the tools (hardware, software, and internet) to deliver the activity without predetermined alternate access options. For example, a video conferencing activity

should not be mandatory for the student using a dial up modem; however, the student may be able to participate at a local library if discussed with the instructor in advance.

Regarding students, they should not be defined by their location. Both on-campus and online students should be considered equally. Outcomes were defined with two components, instructor outcomes that were linked to the objectives of the course, and learner determined outcomes that were defined as the learner's continuation within a program, or by their ability to incorporate newly learned skills in academic programs or on the job (Simonson, 1999).

Blended Learning Studies

Instructors used pedagogical theories, frameworks, and models to guide them in selecting and building lesson plans, the same was true within instructional design for approaching the design of technology lessons (Gedik, Kiraz & Ozden, 2013). It was important to acknowledge when instructors combined technology-based instruction with face-to-face instruction they did not always recognize that they were blending learning in their courses when indeed they were (Picciano, Dziuban & Graham, 2014; Shea, 2007). As the blended learning knowledge base increased and challenges of blended learning environments were identified, the need for theoretical frameworks unique to blended learning environments expands (Graham 2013).

Graham (2009) identified different models for blended learning, which he based upon a collection of journal articles, published books, and reports. He organized the data and discussed the numerous ways that blended learning could be implemented across a wide range of different contexts. He stated "For this reason, it is important to share successful models of blended learning so that all can benefit" (p.376). Graham's definition emerged

from this collected data and offered the definition as a combination of traditional (face-to-face) and distributed (computer mediated) instruction. It was further reported that blended learning could occur at the activity, course, program or institutional levels.

Graham (2009) explained that because there were so many blends, it was helpful to merge and define categories. Three categories of blends were identified as "Enabling blends, enhancing blends and transforming blends" (p.376). The following table was adapted from Graham's *Three categories of blends with examples* (2009, p. 376).

Table 1

Blended Categories with Descriptions

Category	**Description**
Enabling Blends	The main focus of this blend was to offer access and convenience to students seeking higher degrees, certifications, etc.. This blend reduced time spent in the traditional classroom and allowed for more convenient scheduling producing improved access for students regardless of their location. The technologies used, work to enhance traditional instruction, through communication and information technologies.
Enhancing Blends	This blend used a different pedagogical approach where supplemental instructional materials and activities were offered through the online learning environment. This action enhanced the instruction offered in the classroom.
Transforming Blends	Most instruction occurred online, using tools such as simulations, video, and other active learning activities. Within this category active learning theory was prevalent.

Three paths of blended learning were also identified. The first path started within the face-to-face learning environment and moved into the blended learning environment. Path number two advanced from a computer mediated (distributed) learning environment to a blended environment. And the third path was a combination of the first two paths it

was used to develop new courses and programs for emerging needs mostly in the corporate and military training environments (Graham, 2009).

Graham (2009) developed a table that defined five models of online learning that were adopted from the work of Twigg (2003). Twigg defined five online learning models based upon her study of the redesign of 30 face-to-face courses conducted at various universities across the country. Most courses were converted using a blended model. The models were identified as:

- *Supplemental model*. Placed simple learning activities outside of the classroom (online) and left existing classroom lectures intact. Another supplemental model changed classroom activities and lectures, but also added supplemental learning activities outside of class.
- *Replacement model*. Reduced in class-meeting times. Assumed certain activities were better suited for the online environment. The class schedule was altered during the redesign process.
- *Emporium model*. Allowed students to learn at their own pace. All learning activities were offered online, and in person tutoring replaced class meetings. All sections of a course were offered online, labs were equipped with computers; assignments and assessments were identical and developed collaboratively.
- *Fully online model.* All instruction, interactions, and learning activities happen online. No face-to-face meetings were scheduled. Individual faculty members designed and delivered, and responded to all inquiries in their

courses. This model added time to the faculty workload as he/she was the only source of information for the course.

- *Buffet model*. Offered differentiated online learning activities to students. The course was designed to offer options for learning to each student. Students were treated as individuals and not as a homogenous group. Class schedules may or may not include face-to-face meetings.

Twigg (2003) also pointed out that there were two design strategies contained within all models, "(1) the collective commitment of all faculty teaching the course; and (2) the capabilities provided by information technology" (p. 38).

Gedik, Kiraz and Ozden (2013) sought to identify how to implement and integrate blended learning design using Merrill's First Principles (Merrill, 2002) and Authentic Learning (Brown, Collins & Duguid, 1989). Their qualitative phenomenological study focused on the question "What makes a good blend" (p. 1)? The sub-questions asked were: 1.) What are the design considerations; 2.) What are the affordances that assist the instructor using a blended learning environment during a course implementation; and 3.) What are the challenges for the instructor regarding the use of a blended learning environment during a course implementation (p. 2)?

Gedik, et al. (2013) used a Design-Based Research method (Design-Based Research Collective, 2003) to study important issues in the blended learning design process and the Heuristic Inquiry (Moustakas, 1990) method to collect and analyze the data that were gathered. A non-proprietary learning management system was utilized for the online portion of the course. There were four participants, the course instructor (main researcher), and three teaching assistants. The course instructor designed and

implemented the course blend and the other participants observed, took notes, were interviewed, offered feedback, and assisted with the analysis of the data. A course schedule was developed with much consideration of finding a good balance in the face-to-face and online environments for the delivery of instruction, and assessments of the course.

The course designer/instructor created activities based upon "authentic principles and first principles of instruction (i.e., problem, activation, demonstration, application, and integration). Findings related to the instructional design showed that using Merrill's Principles of Instruction provided the instructor with a facilitative approach, because the principles "relate to creating learning environments and products rather than prescribing how learners acquire knowledge and skills from these environments or products" (Merrill, 2002, p.44 as cited by Gedik, et al., 2013, p.9). The outcome clarified which learning activities worked well in each environment. The sequence used for instruction was: (1) introduce concepts in the face-to-face environment; and (2) then allow the students to review and reflect upon the content in the online environment followed by active learning through participating in group and individual discussion board activities (p.9).

In the classroom students were reported as being both active and passive learners, where in the online environment, students were only active learners when participating in discussion board activities. Unlike the face-to-face classroom, the instructor's role in the online classroom was that of facilitator (Gedik, et al., 2013).

Wold (2011) proposed an instructional design model for blended learning English writing courses. She posited that there were advantages to blended learning when

compared to online learning, but felt that there were no effective theories, which created an effective model for blended learning in this context.

Wold (2011) used an approach to build a model where she combined similar theories to apprise the "…structure, environment, experience and people (SEEP) instructional design model" (p. 372). Cognitive load, activity, sociocultural and transactional distance theories were combined to develop the SEEP model. They were selected for their "…relevance to blended learning, online formats and cognition in adult learning …" (p. 373). Although these theories were distinct, they had overlapping areas such as where activity, sociocultural and transactional distance theories "…emphasize group learning and collaboration over an individual's processing of information" and "… they all emphasized that learning was largely a meditational and social process" (p. 373). A practical example was given as how each theory focused on the importance of scheduling the first meeting in a face-to-face environment, so that facilitators may explain the course goals and how the blend works in both environments (Wold, 2011).

Wold warned that the SEEP model had not been empirically evaluated, but argued that by acknowledging common components of the four theories "… a basis for a set of unified research-based recommendations for instructional design practice can be provided" (p. 377).

Gómez and Duart (2012) conducted a case study using a mixed methods research approach to identify the "…students' perceptions of subject design and delivery, with particular reference to learning activities and the roles of lecturers and students during moments of interaction" (p. 259). Socio-cultural activity theory was used to provide a framework for "…studying the forms of human practices as developmental processes"

(p.259). Socio-cultural activity theory was a theory that extended Engeström's (1987) activity system, which expanded upon Vygotsky's (1980) activity system. Vygotsky's activity system explained how "…learning was an activity understood as a process in which a group of subjects interact to achieve a specific purpose (object)" (Gomez, et al., 2012, p. 260).

Engeström (1987) added two elements to the system: rules and division of labor. Gómez and Duart (2012) used activity theory to define their learning environment "as a set of conditions in place for undertaking learning activities" (p.260). A constructivist framework and socio-cultural activity theory were used for the pedagogical aspect of the study.

Gomez et al., (2012) categorized their research questions into three areas, learning activities; student-lecturer interaction; and student-student interaction. Most of the learning activities were designed to be collaborative. Students reported their perceptions of the learning activities were adding to their ability to meet the assigned learning objectives and they also perceived these activities as valuable to their learning processes. Student lecturer interaction was gauged upon the communications in the traditional classroom and in the virtual classroom through assignment instruction, feedback, discussion boards, group work and other communication tools within the learning management system. The interactions were reported as being perceived between instructors and students because feedback was offered throughout the duration of all projects and not just at the end of an assignment through grading. The results for student-student interaction included the student's recognition for the value of group work because they felt they learned more when working in a group then when working individually.

Students also reported group work as assisting them with their time management skills. The conclusion was that students perceived the educational model as being positive (Gomez, et al., 2012).

He, Gajski, Farkas and Warschauer (2015) sought to discover a better learning environment for delivering lectures in Science, Technology, Engineering and Mathematics (STEM) courses. The purpose of their study was two-fold; 1) explore the need for in-class instruction when all essential learning materials were provided to students online; and 2) to integrate the strengths of online, hybrid and flipped instruction using their "flexible" model. Based upon this purpose they decided to conduct a quantitative experiment with a new model of hybrid teaching labeled as the "flexible" hybrid format. They investigated the effects of class attendance, out-of-class effort, and student motivation on exam performance in a flexible hybrid learning environment.

A flexible format was reported as a course design that afforded students the opportunity to interact with learning materials in any way that suited their learning style and by making student on-campus attendance optional. Course materials were provided as lecture videos, PowerPoint files, homework, sample questions, and sample solutions. The flexible attendance option for on-campus classes were three meetings per week, where each session was 50 minutes in length.

The study was done in the western United States, spring of 2013, in an undergraduate electrical engineering course, with 159 undergraduate students enrolled, of which 139 agreed to participate in the study. Among the participants 86.33% (N = 120) were males and 13.67% (N = 19) were females. The academic rank of participants included 101 freshmen (72.66%), 35 sophomores (25.18%) and 3 juniors (2.16%).

The semester was 10 weeks in length and the optional course meetings were 50 minutes in length, three days a week. All learning materials were posted and made available to students in an LMS one week prior to the class meetings. Students were encouraged to ask questions regarding the online learning materials during the on-campus meetings. Classroom discussions about real-world applications from online learning concepts occurred at the beginning of each session. New learning materials were not introduced during sessions, lectures were not repeated, instead instruction was used to reinforce the content provided online by reviewing examples, homework and answering student questions. Content was developed to increase in difficulty as the course progressed. Students were encouraged to master the materials outside of the on-campus classroom.

The results showed that class attendance was associated with improved exam performance. In particular, when the content increased in difficulty it became more important for students to attend the on-campus sessions as those that did performed better on the exams. Although they noted they could not decisively establish this claim. They also implied that online learning might be more effective for delivering less complex course content.

He et al., (2015) reported 'out of class efforts' made by students would predict exam outcomes for the first two periods, however not in the third. Further investigation into the third period showed that students did not put in an appropriate amount of time and "… signs of cramming…" existed. "This result also implied that time management could be a pressing problem in a flexible hybrid environment" (p. 66). Student motivation was reported as being a "…robust predictor of exam performance throughout the course, and

that the effect of motivation was the strongest when the course was at its most challenging stage" (p. 66).

Faculty Experience

To gain insight of the faculty member in higher education and their willingness to practice blended learning, it was important to look at the faculty disposition of technology in pedagogical practice. Georgina and Olson (2008, p. 3) conducted a study to "…understand if there were relationships between technological literacy and its integration into pedagogy, a research study was designed that involved faculty perception of the technology skills and pedagogical practices." What is the faculty experience in using instructional technology as it pertains to pedagogy? Georgina, et al. (2008) report the seminal work of Spotts (1999) and Novitzki (2000) as being the two most influential studies regarding user levels of technology literacy. According to Georgina, et al. (2008) Spotts (1999) was the pioneer that focused his studies on determining and defining user levels of technology. The outcome of the study provided three levels: high-level users, medium-level users, and low-level users. Those who had a high-level usage also believed using instructional technologies were more beneficial than those who had a low-level usage. Spotts (1999) concluded faculty members who were expected to use instructional technology want technological support and academic recognition within their practice (as cited by Georgina, et al., 2008).

For a deeper understanding of technology literacy as it pertains to pedagogy, Novitzki (2000) conducted a study that identified the levels of user proficiency with asynchronous learning tools (ASL) (as cited by Georgina, et al., 2008). This study established three levels of proficiency: low, moderate and high. Both studies supported each other and

created a tool for determining user levels of proficiencies in technology literacy (Georgina, et al., 2008). "One of the keys to understanding technology training might be that instructors prefer technology training that successfully integrates their pedagogy, not technology training that simply reveals how instructional technology tools work" (Georgina, et al., 2008, p.2).

Perceptions

Ocak (2011) posited that although research advocates for the implementation of blended learning, researchers had neglected to study faculty members' perceptions, challenges, and concerns regarding blended teaching and their perceptions of students' learning and motivation. He believes instructors were challenged in their new environment because of their inability to incorporate technology into their teaching practice. The challenges identified for instructors were viewed as 1) resistance to changing their approach from instructor centered to student centered learning; 2) the expansion of the instructor role by adding the layers of technical tutor; 3) the lack of technical support; and 4) working with an instructional designer. He interviewed 117 faculty members from five universities. The qualitative data showed faculty perceptions as (pp. 694-697):

- *Difficulty of adoption to new technology*. Faculty could not use the technology efficiently and had difficulties adapting to the technology. He reported this is why faculty chose not to teach blended courses.
- *Lack of institutional support.* Approximately 17% voiced a need for better institutional support.

- *Lack of electronic means*. Approximately 5% of students did not have access to digital resources.
- *Complexity of the instruction*. Approximately 25% of the instructors found it difficult to control the learning experience.
- *Lack of preparation and planning*. Due to confusion about how to combine the two delivery methods.
- *Lack of effective communication with students*. For example, students would email and ask the same questions in the face-to-face classroom.
- *Changing roles*. Approximately 12% felt the blended environment changed their role from teaching to guiding.
- *Spending more time*. Approximately 8% report concerns about spending more time preparing and teaching in blended learning environments.

Napier, Dekhane and Smith (2011) sought to discover the impact of blended learning on students and to capture faculty perspectives on teaching blended learning courses. The study was conducted over four semesters with three faculty members. The qualitative data collected from faculty interviews produced five factors for teaching a successful blended learning course as (p. 28):

1. Play to your strengths.
2. Utilize technology.
3. Build a classroom without walls.
4. Provide tutoring and online support.
5. Creatively manage out-of-class time.

The data also produced five challenges (p. 29):

1. Creatively manage in-class time.
2. Balance face-to-face and online components.
3. Engage and motivate students.
4. Ensure sufficient out-of-class support.
5. Assess student fitness for online environment.

Table 2 compares the findings from Ocak (2011) and Napier, et al., (2011).

Table 2

Comparison of Teaching Challenges

Ocak (2011)	Napier, et al., (2011)
Difficulty of adoption to new technology.	Not addressed.
Lack of institutional support.	Ensure out of class support.
Lack of electronic means.	Assess student fitness for online environment.
Complexity of the instruction.	Balance face-to-face and online components, and engage and motivate students.
Lack of preparation and planning due to confusion about how to combine the two delivery methods.	Balance face-to-face and online components.
Lack of effective communication with students.	Ensure out of class support.
Changing roles.	Balance face-to-face and online components.
Spending more time.	Balance face-to-face and online components.

Although both Ocak (2011) and Napier, et al., (2011) addressed similar aspects that challenged faculty, they contextualized them slightly differently. Since their findings were similar, these factors or aspects of teaching in a blended learning environment could be considered part of the faculty experience of blended learning.

Blended Learning Case Studies

According to Yin (2014) the components of case study design research allowed the researcher to develop a foundation for a theory and schematic related to the topic of study. Therefore, a case study can provide a foundation for additional research to develop a theory (Eisenhardt, 1989). Furthermore, a case study could be the basis for an assortment of research studies within the blended learning environment.

Scientific theories provided explanations for broad ranges of phenomena. In general, they tended to be deliberate, coherent, systematic, predictive, broadly acceptable and applicable. "Behavioral and social science groups have explored extensively what constitutes theory and what role theory plays in the knowledge creation process" (Graham, 2013, p. 11). Theories are typically sustained by repeated empirical evidence. It is possible to change theories providing the discovery of new, robust evidence. Theories help us understand a multiplicity of things. For example, learning theories provide perspective on how people learn, and mathematical theories provide applicable formulas to help understand wonders such as the movement of objects.

Case studies can be used for descriptive, explanatory, or exploratory purposes (Yin, 1993). Creswell states case study research "involves the study of an issue explored through one or more cases within a bounded system (i.e., a setting, a context)" (p. 73). Case studies help researchers address questions of why and how. Experimental or quasi-experimental research methods did not tell us how an intervention works, or why an intervention had an effect in a particular bound case. The purpose of such studies is to generate information about whether or not an intervention had any predefined effect (Creswell, 2007). Because the purpose here was to understand the circumstantial

conditions that affect faculty perceptions towards blended learning within the community college, the qualitative case study approach seemed to be the best fit. Following are some examples of how case study research had been used to examine research problems that were similar to the problem being addressed in this study.

Jokinen and Mikkonen (2013) used the qualitative case study design bound to an adult nursing program "… to gain insight into how teachers respond to the use of blended learning…" in a newly designed undergraduate nursing program (p. 2). A qualitative case study method was used because "the goal of the study was to describe teachers' experiences of planning and implementing teaching and learning in a blended learning adult undergraduate nursing program" (p.2). Data were collected using a focus group interview methodology. There were three focus groups, each group had between four to six participants. Each participant was a faculty member who taught the curriculum the first academic year the new nursing program was implemented. A theme interview process was used. These themes included: the common design of the course; teaching approaches in the blended learning context; designing assessment of learning outcomes; thoughts on technology in teaching; and experiences of teaching in the nursing program (p. 2).

The reported results which emerged from the interview data analysis included nine themes to describe the instructors' perceptions about planning and implementing teaching in a blended learning based adult nursing program. They were: collaborative planning; integration; student group; face-to-face teaching; online learning; learning activities; teaching and learning methods; learning in and about work; and confirming competences (p. 3).

Overall the results showed instructor reports for teaching blended learning as "positive" (p. 3). Collaborative planning was noted as a good thing because participants reported being able to exchange ideas with each other to create an "integrated curriculum," and to exchange course design experiences (p. 3). The challenges of collaborative planning were reported as the process being time consuming, arduous, and unnatural because they were not used to working with others when planning their curriculums.

The theme of integration planning and teaching was reported as "…in close relation to the previous theme collaborative planning" (p. 3). The participants worked to integrate courses, subjects, learning tasks, learning objectives and to integrate learning activities in practice. Learning assignments were planned from the perspective of "…working practice in order for the assignments to be directly applicable to work" (p. 3). Participants reported the introduction and assignment of learning tasks to be of high importance.

The theme of student group was reported as highly important to participants because they felt that this design structure "… played a significant role…" to their experience with blended learning (p. 3). Participants felt that the student groups enriched the student learning experiences because each student brought their life experience to the group. Study participants thought that having permanent members in each student group hindered the desired outcome for the teaching and learning design because over time each member of the learning group created a participatory role within the group, thereby limiting their experiences. Other challenges for planning and the implementation of

student groups included managing the size of the student group and planning for its diverse nature with regards to the students' demographics (p.3).

Only challenges were reported for the theme of face-to-face teaching. The participants reported having a difficult time deciding which content to put online, and which to use in the face-to-face environment. This result is very similar to Ocak's (2011) and Napier, Dekhane and Smith's (2011) findings. What emerged as important was to cover the most difficult topics in class, and to use precise and direct instruction for learning activities.

The online learning theme was reported as being challenging for those who had little to no online teaching experience. The report states that some participants only used the online environment for distributing study materials. It is further reported that the study participants voiced concerns about students claiming ignorance towards participation in the online portion of the course. "Moreover, teachers discussed the teacher's role in online learning when and how the teacher should participate in online discussions" (p. 3).

For the theme of learning activities, it is reported that participants followed clinical practice guidelines when creating the activities and assignments. As a result, the focus was placed upon relating activities and assignments on nursing practice. It is reported that developing a working community through assignments was the participants' perception or goal. "However, the teachers' experience was that fairly often the assignments were superficial and lacking justification and in-depth discussion" (p. 4).

The results reported for the pedagogical theme were not surprising. The reported experience was that teaching methods had to be changed between the learning

environments. Participants reported that they and their students were challenged by these changes.

The theme of learning in and about work was reported as not being taken into consideration by some, while other participants reported emphasizing the work environment into their assignments and activities.

The confirming competences theme was reported as important for most participants because much of the learning took place outside of the classroom. Methods of measurements used to confirm the competences reported were tests, exams, peer reviews, group exams and self-assessments.

The researchers concluded that the participants in the study approached teaching blended courses in a positive way. The main obstacles were reported as course design and planning. They also reported that the participants who had experience with teaching in the blended learning environment were more likely to choose to teach in a blended learning format. It is further concluded that to implement blended learning "a shift in culture between both teacher and student in utilizing technology" (Johnson et al., 2010 as cited by Jokinen & Mikkonen, 2013, p. 4) is necessary.

The researchers felt that their study added to the knowledge base regarding the teacher's experience with planning and implementing blended learning. Lastly, "One notable finding that was not reported in previous research was that in addition to face-to-face and online learning, the blended learning approach may also include learning in and about work. In this study, teachers experienced that when the course included learning in work places, it enabled the highlighting of relevant issues in teaching and learning during face – to –face sessions as well" (p. 5).

Reported as a limitation of this study was the environment where the study took place. Because the researchers and participants all worked within the same environment it "might pose a threat to the trustworthiness of the study" (p. 3). To address this issue, a colleague acted as a researcher and reviewed all aspects of the study to increase the objectivity of the process for data collection processes and analysis.

The authors felt that the teacher experience in planning for teaching in blended learning courses was well documented, but the teaching experience was not well documented and more research needed to be done in that area. They identified a gap in the research for teaching higher education blended learning courses as "the real work environment" (p.5).

King and Arnold (2012) used a qualitative collective case study approach to study "How do higher education blended learning faculty take into account the factors of course design, communication, and motivation when designing their courses?" (p. 47). The study was bound to the College of Education faculty who taught blended courses. A total of 91 graduate and undergraduate professors were solicited, but only five undergraduate professors agreed to participate. Each participant was considered a case or unit of analysis. Data were collected though a demographical survey, a 14 question open-ended survey to address course design and a follow-up face-to-face 7 question interview was administered to each case participant to support the overarching research question.

The interview data were indexed prior to data analysis. The researchers coded the survey responses and interview transcripts using an *a priori* coding scheme based upon three factors: communication, motivation and course design (p. 49). During the analysis

it was determined that there were two processes to ‘course design’, so they recoded it into course preparation and course design thereby creating four themes.

Course preparation is operationalized as “Any action taken by the professor to learn about blended models and best practices before creating and while teaching of a blended course” (p. 50). Code descriptions within this theme were attending workshops/conferences on blended learning, reading textbooks and journal articles, consulting with peers who teach blended learning courses, and consulting with technology technicians (p. 50). Of course the results addressed each of the codes. Data showed 3:5 (or 60%) participants reported attending technology training, and required technical support throughout the design and implementation period. What is interesting is that when they mastered the technology they became consultants to their peers and encouraged them to consider this teaching environment. Participants also recommended that their peers incorporate technology gradually into the classes to gain experience using these tools. Further reported is that preparing for a blended course is more time consuming and requires more discipline (Graham, 2009; Jokinen & Mikkonen, 2013; King & Arnold, 2012; Napier, Dekhane & Smith, 2011; Ocak, 2012).

Course design is operationalized as “Organization and included components of a blended course” (p. 50). Code descriptions within this theme were organizing the course (both online and in-class), descriptions of assignments and assessments, descriptions of the use of LMS features, specifications for discussion board posting, discussion of other technologies used in the course, how students were grouped for assignments and discussions (p. 50). The course designs were varied. While all participants used the LMS tools for discussion, assignments, and to deliver content, only 4:5 (or 80%) used the

news, dropbox, and gradebook. Participants also differed in the amount of scheduled face-to-face meeting times, assignment schedules, and discussion board rules. Other types of technology reported being used were publisher videos as a mini-lecture activity, websites, and screen capture technology.

Communication is operationalized as "Student-teacher and student-student interaction in and out of the classroom" (p. 50). Code descriptions within this theme were use of email correspondence between students and faculty, faculty discussion board comments/facilitation, in-class group discussion facilitation, use of tech resources, online office hours, office hours, LMS news usage, use of other technology communication tools, and graded assignment feedback. Participants reported communication as a major aspect of conducting a successful blended course. In this study the LMS included email, news, and discussion board tools for class communications. The news tool was used to post timely and important class information, email was typically used for private communications and the discussion board was reported as having forums for technical issues, and providing a social discussion area for the class (pp.53-54).

Motivation was operationalized as "Extrinsic factors such as teacher encouragement and course organization in addition to intrinsic motivation" (p. 50). Code descriptions within this theme were description of course requirements, workload, time allocated to online and on campus class meetings, teacher and student level of technology comfort, and frequency and quality of feedback (p. 50). Motivational actions taken by participants also varied. One participant reported posting grades daily and placing students into teams to motivate the class. While two other participants used a point grading system for each online discussion message posted (p. 54). Interestingly, the participants reported that

they had not considered the factor ‘motivating student participation’ when designing their classes. “Motivation was more like a consequence that came from quality course design and communication” (p. 55).

King and Arnold (2012) inferred in order to develop successful and effective blended learning courses faculty must have access to professional development and resources as needed by each individual. Communication was reported as being critical to the success of a blended course. And planning the blended learning course design prior to its development and implementation was also found to be imperative. Another recommendation was for faculty to reflect upon their course at the end of each semester and identify what worked well, and what needed improvement and to adjust the course design accordingly. Peer mentoring was reported as being a valuable outcome of mastering the design process and teaching of a blended course.

In conclusion, King and Arnold (2012) recommended replicating the study at other institutions of higher education institutions. Another recommendation was to conduct this study with undergraduate and graduate level courses to investigate how the consideration of course preparation, course design, communication and motivation might differ between them.

Ocak (2011) used an exploratory case study to identify what problems faculty faced while teaching blended learning courses. He chose this method because he wanted to “see how the different experiences and knowledge of blended courses affected faculty members’ teaching of blended courses” (p. 693). Similarly, an exploratory case study design suits the purpose of exploring faculty members’ experiences with blended learning courses and how those experiences affect their dispositions. Studies that have goals for

identifying perceptions and practices of faculty members who teach blended learning courses within other institutions (Jokinen & Mikkonen, 2013; King & Arnold, 2012) and the community college are needed (Drysdale, et al., 2013; Helms, 2012).

Summary

Defining blended learning was complicated as was apparent when reviewing studies that offer so many definitions for blended learning and varying combinations of theories, models, and frameworks. The literature reviewed also revealed many explicit theories, frameworks and models available for the online and traditional learning environments, but there were few available explicitly for the blended learning environment.

While studies identified student outcomes and student satisfaction, they did not identify in-depth descriptions of students' blended learning experiences. The faculty and administrator experience was even less documented. Additionally, it was difficult to find studies exclusive to the experience of blended learning in the community college.

Blended learning had been an area of in depth research for about 15 years and from these studies, interest in blended learning as an effective teaching and learning strategy has grown. Specifically, most research had been focused primarily on blended learning largely by the efficacy of blended instruction, students' perceived success and satisfaction, and combining pedagogical theories to form models and frameworks for design and best practices (Drysdale, et al., 2013; Wang, Han & Yang, 2015). There are few studies that focused on the faculty dispositions toward implementing blended learning (Drysdale, et al., 2013). Course delivery in the mode of blended learning is projected to increase in higher education over the upcoming years (Allen & Seaman, 2013). More research should be done to identify the faculty dispositions towards blended

learning, because faculty members play a major role in its successful implementation (Ocak, 2011). If faculty members were not happy about teaching in a blended modality or were ill prepared to teach in a blended modality, all parties involved would suffer. Blended learning's successful implementation is reliant upon the entire ecosystem (Drysdale, et al., 2013).

Much of the research on blended learning has been quantitative as shown in the literature review (Bolliger & Wasilik, 2009; Collopy & Arnold, 2009; Demirer & Sahin, 2013; He, Gajski, Farkas & Warschauer, 2015). Therefore, research studies dealing with blended learning overall often relied upon quantitative data that did not address the how and why of the phenomenon. This study addressed the community college faculty members' dispositions for teaching and designing blended courses from a qualitative perspective. In the following chapter, the research method, qualitative exploratory case study approach, is described in detail.

Chapter 3

Methodology

The need to explore community college faculty dispositions toward blended learning was important given that there were 12.3 million students enrolled in community colleges across the United States (AACC, 2016) and each year more blended academic programs are added to their curriculums (Allen & Seaman, 2011). The goal was to understand the community college faculty member's dispositions towards blended learning. By gaining a deep and context-specific description of these faculty experiences, recommendations of best practices for implementing blended learning in the community college were developed.

In this chapter the research design, sampling technique, setting, gaining access, general steps, and human subjects are discussed. Munhall and Chenail's (2008, p. 46) outline for reporting qualitative research studies was used to guide the development of this chapter.

Qualitative Exploratory Case Study Approach

A qualitative exploratory case study approach was used to capture participants' perspectives based upon real-world events (Yin, 2014). A demographic survey (See Appendix A) followed by individual participant interviews helped the researcher capture participants' perspectives based upon real-world events (Yin, 2014). Data analysis was performed using structural and descriptive coding methods.

The goal, research question, and subquestions fit well with Yin's (2014) suggested conditions for conducting a case study. First the research questions mainly addressed "how" and "why" questions; second, there was no need for participant behavioral controls, and third, the research focused on contemporary events because the researcher believed they were relevant to the phenomenon under study (Yin, 2014).

The researcher explored how community college faculty embraced blended learning and why they felt the way they did about their blended learning experiences. No behavioral controls were used as the intent was to explore faculty perceptions about their blended learning experiences. It would be impossible to have a true picture of faculty dispositions towards blended learning without considering the context within which it occurs (Ocak, 2011). Furthermore, a qualitative exploratory case study approach was used to develop a thorough understanding of the circumstantial conditions (Yin, 2014), which affected faculty perceptions towards the phenomenon.

Sample and Setting

A purposive sampling method designed to meet the boundaries of the case study was used (Yin, 2014). Participants were SCCC faculty who have taught at least one blended learning course for the college.

Suffolk County Community College is a commuter college that is part of the State University of New York (SUNY) system. The college has three campuses and two satellite sites. There are approximately 26, 000 students currently enrolled with approximately 4,500 unique students enrolled in DE courses. The distance education program offers approximately 300 online courses and 30 blended/hybrid courses each fall

and spring semester. The summer semester offers about 100 distance education courses in total.

Faculty must attend professional development workshops prior to teaching distance education courses at SCCC. These certification workshops do not separate fully-online from blended learning training. There are approximately 400 faculty members who are SCCC certified to teach fully online and approximately 60 certified that teach blended learning courses.

Gaining Access

The researcher works as a Coordinator of Instructional Design for SCCC. She is also a BL mathematics instructor, with the rank of Associate Professor. Her employment provides her with access to SCCC faculty. She has trained and assisted some of the faculty with online course design. All BL faculty members were solicited to participate in the study, including those that she has worked with. To prevent researcher bias and to add validity to the study, several sources of data were collected including institutional effectiveness (IE) reports, survey results, interview transcripts, memos, and observation notes that were taken by the researcher during the interviews. In addition, two peers from SCCC served as external reviewers. One reviewer is a professor of mathematics and the other is the associate dean of instructional technology.

General Steps

A request to conduct the study from the Institutional Review Board (IRB) at Nova Southeastern University (NSU) was submitted and approved (Appendix B). Upon approval of the NSU IRB, an IRB request to conduct the study at SCCC was made and also approved (Appendix C). A list of all SCCC blended learning instructors was

requested from Institutional Effectiveness. In addition, a list of all certified BL instructors was made to the Office of Instructional Technology. The lists were compared for accuracy and used to solicit participants through email.

The external reviewers were asked to review the survey, the survey invitation (Appendix D), and the semi-structured interview questions (Appendix E). They were instructed to report on any readability issues or ambiguities found within these documents. After their inspection, the researcher created the survey invitation to distribute to faculty via email along with a link to the survey, which she created in SurveyMonkey. The email along with the survey link was then sent back to the reviewers to ensure that the email invitation was clear and the link to the survey worked as expected.

The survey was sent to all 60 SCCC BL faculty instructors. The purpose of the survey was to verify experience in teaching within a blended learning environment at SCCC, establish an overall definition for blended learning, identify the percentage of content offered online and the number of meetings required on campus per semester. An invitation to participate in a follow-up interview about their experiences teaching BL courses was extended at the end of the survey. There were 26 faculty members (43%) who completed the survey; 19 full-time faculty members, 5 adjunct faculty members and 2 faculty members who preferred not to answer. The results from the survey were collected and a database was created to house and analyze the survey data using HyperResearch 3.7.3 software. Thirteen (50% of the survey respondents) agreed to participate in a follow up interview. Of the thirteen faculty members, ten (three adjuncts and 6 full-time faculty members) were successfully contacted and interviews were

scheduled. There were three participants from the Ammerman campus, six from the Grant campus, and one from the Eastern campus. Interviews were conducted on three of the main campus locations Ammerman (Selden, NY), Eastern (Riverhead, NY), and Grant (Brentwood, NY). Participants chose their preferred campus location and interview date and time. To maintain anonymity, the researcher reserved a conference room as a generic meeting space for the interview. No participant name was registered or associated with the meeting. At the request of the participants' three interviews were conducted in their private offices.

Once a schedule was agreed upon, the interview questions were emailed to allow participants to reflect upon the questions prior to being interviewed. Interview rooms were reserved without identifying the purpose of the meeting. However, three participants preferred to meet in their offices. Each participant was interviewed individually. Prior to the start of the interview, all participants were asked to complete an informed consent form (Appendix F). Interview responses were documented and digitally recorded (audio only) and participant observations were made and documented during the process. Participants were asked if they would agree to an additional interview if necessary for clarification of the collected data (Creswell, 2007; Yin, 2014).

Participants were also asked to submit an outline of their blended course. It was intended that the course outlines be used to verify the data collected from the survey (Yin, 2014). However, seven out of ten participants were able to submit an outline. Three were unable because they had not taught a BL course this academic year, and didn't keep a digital copy of their outline.

The researcher transcribed each interview. Each transcript was read and accuracy was verified by comparing the transcript to the recorded interview and interview notes. A second database was developed to analyze the interview data using HyperResearch 3.7.3 software. All survey, interview and observational data were entered into HyperResearch. A coding guide (Appendix G) was developed and used to code the first transcript. Both external reviewers were asked to analyze the data of the first transcript using the coding guide. They were instructed to document their coding choice, create a new code when they deemed it necessary, and write a rationale for each coded source text segment. These steps worked to ensure that researcher bias was not present within the data analysis process (Yin, 2014). A meeting to review external reviewer's analysis of codes, and coding rationales was held. Approximately 95 percent of source text was coded within agreement. Working with peer external reviewers also worked to establish reliability and validity (Creswell, 2007). Guion, Diehl, and McDonald (2011) refer to this practice as "theory triangulation" stating it "… involves the use of multiple perspectives to interpret a single set of data" (p. 2).

The survey and interviews were conducted during the Fall 2015 semester (15 weeks). All interviews were transcribed as soon as possible. Data analysis began as soon as there was agreement about the codebook between the researcher and the external reviewers.

Data Collection and Preparation Methods

Yin (2014) acknowledges four principles of data collection as 1) using multiple sources of evidence; 2) creating a case study database; 3) maintaining a chain of evidence; and 4) exercising care when using data from electronic sources (pp. 118-129). A survey instrument, interview responses, observations during interviews and archival

records were used to collect data. All processes were documented and data were systematically collected, analyzed and protected.

Survey

The online survey consisted of 11 self-reported items used to determine the criteria eligibility for the study. Demographic characteristics self-reported by the participants included gender, age, number of academic years teaching at SCCC, faculty rank, campus assignment, training to teach blended learning, what year the training occurred, how many blended courses taught each academic year, and how many taught during their tenure at SCCC. Three additional open-ended questions included: (1) How do you define blended learning? (2) What percentage of your course is taught online? and (3) How often does your blended learning course meet each semester? The survey concluded with an invitation for faculty to participate in a follow-up interview.

Semi-Structured Interviews

Brinkmann and Kvale (2015) define semi-structured interviews "…as an interview with the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena" (p. 6). A semi-structured interview guide was created based upon research from the literature review to address the purpose of the study for describing and exploring community college faculty practices, beliefs and dispositions towards blended learning. There were fifteen semi-structured interview questions that aligned with the research question and subquestions.

The overarching question was: *What is the disposition of community college faculty towards blended learning?* The five subquestions were answered in combination of the demographic survey and the interview questions. The survey and interview questions

probed the participants for data that related to each sub-question and are categorized in the following table.

Table 3

Research, Survey and Interview Questions

Research Question	Survey Question	Interview Question
1. How do faculty describe blended learning?	3. What is your teaching content area? 9. How do you define blended/hybrid learning? Please elaborate.	1. What is your teaching content area? 2. How do you define blended/hybrid learning? Please elaborate.
RQ2: How do faculty implement blended learning in the courses they teach?	8. In a typical academic year, how many blended learning courses do you teach? If zero ask "Overall, how many blended courses have you taught during your tenure at SCCC? 10. What percentage of your blended/hybrid course is taught online? 11: How often does your blended/hybrid class meet on-campus in one semester? What reasoning did you use to determine the number of meetings in each environment?	3. In a typical academic year, how many blended learning courses do you teach? If zero ask "Overall, how many blended courses have you taught during your tenure at SCCC? 4. Which courses do you teach in a blended learning format? Is there any particular reason why you've chosen to teach these specific courses as blended? 5. What percentage of your blended/hybrid course is taught online? 6. How often does your blended/hybrid class meet on-campus in one semester? What reasoning did you use to determine the number of meetings in each environment? 7. What do you think about the degree of contact you have with your students when teaching a blended course?

Research Question	Survey Question	Interview Question
RQ3. How do faculty perceive their roles in the context of a blended learning course?		8. How do you describe the role of "teacher" or "instructor" in a blended learning course? Please elaborate. 9. How do you feel about your interactions and connecting with students when teaching a blended learning course? 10. In your opinion, what level of technology knowledge is required for teaching a blended course? Please explain. 11. Describe your level of technology skill?
RQ4: What problems do faculty face when implementing blended learning?		12. In your opinion, what, how and why does teaching blended learning courses work or not work? Please elaborate. 13. What recommendations would you give to other instructors who are considering teaching blended learning courses? 14. In your opinion, why does/doesn't blended learning work for community college students?
RQ5: What aspects of blended learning do faculty embrace and why?		15. What experiences have contributed towards your choosing to teach in a blended learning format? If you choose not to teach in a blended learning course, please describe your experience(s) stating why you don't.

Each participant was interviewed individually and the same set of interview questions were used for each interview. The survey and interview questions were intended to answer the research questions addressed above. Ocak's (2011) interview questions 1-3 were used and 4-8 were modified to elicit more in-depth responses as suggested by Moustakas (1994).

All interview responses were digitally recorded and documented using a pen and paper. Observations about the interviewed participants were also documented using a pen and paper. The researcher transcribed the interviews and loaded the transcripts into HyperResearch, a qualitative research database, on a personal password protected computer. The digital audio files were saved to a password protected folder on the researcher's computer. All interview notes were used to identify emotion and verify recordings, and entered into transcripts.

Other Data Sources

The course outline was used to confirm how often the course met in the traditional classroom, the type of learning activities that were conducted online, and what external resources were being utilized such as publisher websites. Archival records were used to discover who has taught or is teaching blended courses, the policies of teaching blended courses within SCCC, and the official SCCC definition of blended learning.

Data Analysis

Data analysis was synchronized with data collection and began immediately (Baxter & Jack, 2008; Yin, 2014). The first transcript was coded using a thematic, descriptive

approach following these steps:

Step 1: The researcher transcribed the recorded interview data and notes. She then printed, read and annotated the transcripts.

Step 2: The researcher then read and re-read the transcripts to get close to the data (Briki & Green, 2007). Notes were written on each transcript (2007) and entered into the digital transcript file.

Step 3: Once the researcher read and re-read the transcripts, they were uploaded to the database and codes were either assigned to the source text from the codebook or created when deemed necessary. Any new codes were added to the codebook. Annotations were added as needed for coding rationale into the database.

Two external reviewers were asked to code the first transcript using the revised codebook. They were instructed to (1) code the transcript, only using codes thought appropriate; (2) create a code if no other code worked; and (3) provide a rationale for each code they used or created with each portion of source text. Each reviewer met with the primary investigator and discussed their coding rationale and newly created codes. Between them, there was a 90 percent agreement about code assignments. No other transcripts were coded until the reviewers reported their findings in writing and met with the primary investigator.

Saldaña's (2013) coding manual was used to guide the entire process. Saldaña recommended using a two cycle coding process. Based upon the semi-structured data gathering protocol, a decision to use "structural coding" was made (Saldaña, 2013). In addition, a descriptive coding method was used for the interview data, as Saldaña also suggested that it was appropriate to use more than one coding method. The descriptive

coding method was a good process for new to qualitative researchers and was also good to use for coding interview data (2013). The descriptive coding process remained the same as the thematic descriptive coding process described above.

Frist cycle coding included parsing out the codes by sub-research question, so there were five structures. The second phase of first cycle coding included coding the source text, recoding the source text, comparing the coded source text, annotating the coded source text, and recoding until satisfied that all code's source text fit with each code (Saldaña, 2013).

Second cycle coding included the classification, prioritization, integration, synthesis, abstraction and conceptualization of the data. The data sources were again compared, notes and annotations were considered, codes were merged where appropriate, through this process until themes began to emerge (Saldaña, 2013).

Trustworthiness

Trustworthiness was a concept used to combine a set of logical tests that measured the quality of the research design (Yin, 2014). To address trustworthiness, a common strategy of peer examination of the data during the analysis stage was used "…the consistency of the findings or 'dependability' of the data can be promoted by having multiple researchers independently code a set of data and then meet together to come to consensus on the emerging codes and categories" (Baxter & Jack, 2008, p. 556). Two external peer reviewers worked to meet this requirement as previously identified.

Summary

This chapter presented a detailed explanation of how the investigation was conducted. It explained exactly what type of research study was done, which research methods were

employed to answer the research questions and how the research was carried out conceptually and operationally. The data sources were identified, peer reviewer roles were defined, the sample was identified, the setting for the study was described, and data analysis methods were discussed. In this chapter the research methods described provided the reader with a thorough description of how the study was conducted to assist the reader in understanding the next chapter that discusses the findings of the study.

Chapter 4

Results

Although blended learning has been reported on since around 2002, there is an overall need for additional investigation (Halverson, Graham, Spring, Drysdale, & Henrie, 2014; Helms, 2012; Picciano, Dziuban & Graham, 2014). Much of the research conducted has been to establish the effectiveness of blended learning within specific content areas and with four year colleges and universities. There are, however, fewer research studies that address the needs and experiences of blended learning faculty, their culture, beliefs and attitudes towards blended learning environments within higher education in general, and fewer found that address community colleges (Drysdale, Graham, Spring, & Halverson, 2013; Halverson, et al., 2014; Ocak, 2011; Helms, 2012). The goal was to understand the community college faculty member's dispositions towards blended learning.

Specifically, this study was conducted to capture the experiences of the community college blended learning instructor to describe the problems they faced, and their beliefs and attitudes towards blended learning. A qualitative case study approach as described in Chapter 3 was used to explore and answer the following research question: *What is the disposition of community college faculty towards blended learning?* Understanding the faculty experience and disposition towards blended learning will assist with preparing community college faculty to teach in this environment.

Chapter 4 provides the results of this study. First, findings from the survey are presented followed by findings from the semi-structured interviews. The data analysis produced fifteen themes and 32 categories, which are identified and discussed.

Survey Results

Twenty-six participants completed a survey, which consisted of eight demographic questions and three open-ended questions. Participants were able to select *prefer not to answer*, or *skip a question* if they preferred not to provide a response. Also, if a participant reported 0 for the overall number of BL courses taught, then the survey ended and they were thanked for their participation. Therefore, not all participants responded to all questions. Demographic characteristics self-reported by the participants are included in Tables 4 - 12.

Table 4

Gender

Female	Male	Prefer not to Say
17	8	1
65.38%	30.77%	3.85%

Note. N = 26. SQ1.

Table 5

Age

Age	25-35	36-45	46-55	56-65	66 and over	Prefer not to Say
Number of Respondents	1	6	4	8	5	2
Percentage	3.85%	23.08%	15.38%	30.77%	19.23%	7.69%

Note. N = 26. SQ2.

Table 6

Years Teaching

Minimum	Maximum	Mean	Mode
2 years	48 years	18.28 yrs.	16 yrs.
Tens	Ones	Response Count	Response Percentage
Tens	Ones	Response Count	Response Percentage
0	2, 2, 4, 7	4	16%
1	0, 0, 1, 2, 4, 5, 5, 6, 6, 6, 7, 9	12	48%
2	0, 1, 2, 3, 7	5	20%
3	4, 6	2	8%
4	0, 8	2	8%

Note. N = 25. SQ3.

Table 7

Faculty Rank

Faculty Rank	Instructor	Assistant Professor	Associate Professor	Professor	Adjunct Assistant Professor	Adjunct Professor
Response Percent	4.17%	20.83%	16.67%	37.50%	12.50%	8.33%
Count	1	5	4	9	3	2

Note. N = 24. SQ4.

Table 8

BL Teaching Content Area

Answer Options	Response Count	Response Percentage
ACC (accounting)	1	4.2%
BIO (biology)	2	8.3%
BUS (business)	3	12.5%
CHE (chemistry)	1	4.2%
COM (communications)	1	4.2%
CST (computer science)	1	4.2%
HIT (health information technology)	1	4.2%
LAW (law)	2	8.3%
MAR (marine biology)	2	8.3%

Answer Options	Response Count	Response Percentage
MAT (mathematics)	6	25.0%
NUR (nursing)	2	8.3%
PSY (psychology)	1	4.2%
SOC (sociology)	1	4.2%

Note. N = 24. SQ5.

Table 9

BL Campus

Campus	Ammerman	Eastern	Grant
Multiple Response Count	9	14	5
Response Percent	36%	56%	20

Note. N = 28. SQ6. Participants may report multiple campuses.

Table 10

Received Training

Choice	Yes	No
Response Count	16	9
Response Percent	64%	36%

Note. N = 25. SQ7.

Table 11

Year Received Training

Year	Response Count	Response Percentage
2003	1	6.25%
2004	3	18.75%
2005	4	25%
2007	2	12.5%
2010	3	18.75%
2012	1	6.25%
2013	1	6.25%
2014	1	6.25%

Note. N = 16. SQ7: If yes, what year did you receive training?

Table 12

Number of BL Courses Taught

Number of Courses Taught Per Academic Year		
Number Reported	Response Count	Response Percentage
0	6	24%
1	10	40%
2	5	20%
3	2	8%
4	1	4%
5	1	4%
Overall Number of BL Courses Taught		
Range	Response Count	Response Percentage
0	0	0%
1 – 10	22	88%
11 – 20	2	8%
21 or more	1	4%

Note. $N = 25$. SQ8.

To ensure the case study criteria was met, the survey qualified participants using the question: In a typical academic year, how many blended/hybrid learning courses do you teach? If the answer was zero, the survey branched and asked "how many blended learning courses have you taught during your tenure at SCCC?" If the number was zero again the survey ended and participants were thanked for their time. The self-reported results for number of BL courses taught per academic year ranged from 0 to 5 per academic year with a mean of 1.4 per year, a median of 1 per year and mode of 1 per year, per participant. The range for the number taught was reported as 1 to more than 21 per tenure at SCCC, with an average of 1-10 number of BL courses taught per participant during their tenure.

The open-ended questions included: 'Definition of BL' at 25 responses (SQ. 9), 'percentage of course taught online' at 23 responses (SQ. 10) and 'frequency of on-

campus meetings per semester' at 24 responses (SQ. 11) these questions supported the interview data.

When asked to define blended learning, participants reported many variations for the definition. The following are examples of BL definitions submitted by survey participants for this open-ended question:

- "A combination of face-to-face and online learning/teaching that is particularly appropriate for my subject area of Cinema Studies."
- "Hybrid learning combines traditional face-to-face class time with online coursework."
- "In blended/hybrid modalities a portion of the learning occurs online and another portion in traditional face-to-face."

Participants self-reported on 'percentage of course taught online' with a range of 50 to 90 percent taught online. The mean was 60.41 percent, median was 50 percent and the mode was 50 percent taught online. The last open-ended survey question identified how many on-campus meetings each participant scheduled for their courses. The range reported by participants was between twice a semester and once a week. Ten of the 23 participants (43.48%) reported meeting once a week and 13 participants (56.52%) reported meeting a specific number of times per semester as follows: {2, 3, 3, 3, 4, 4, 5, 5, 7, 7, 7, 8, 8} where the median is 5 and the mode is 3 and 7.

Interview Results

A face-to-face inquiry was conducted with 10 participants; there were seven full-time faculty members and three adjunct faculty members. A conference room was reserved for the scheduled interview on a date and time that worked with the participant's

schedule. A 15-question semi-structured interview guide was used to ensure a systematic interview approach. Each interview lasted from 45 to 60 minutes. All participants signed an informed consent form prior to the start of their interview and each interview conversation [audio] was digitally recorded for transcript accuracy. All interviewed participants agreed to be contacted for clarification of data if necessary. All transcripts were transcribed verbatim with field notes (Appendix H) taken as needed to ensure the accuracy of responses as described in Chapter 3.

All data were initially analyzed and described based upon each interview question and sequenced by each research subquestion. The findings are presented in a narrative format categorized by each of the five research sub-questions. Each of the 15 open-ended questions corresponded to at least one of the sub-questions as displayed in chapter 3. Direct quotes from the narratives are presented as exemplars for each inquiry made.

Teaching Content Area

IQ1: What is your teaching content area? Interviewed participants reported their content areas as: Business, biology, chemistry, computer science, mathematics, nursing sociology, and prefer not to say. Appendix I provides a table categorizing all interviewed participants' blended learning content areas.

Definition of Blended Learning

IQ2: How do you define blended learning? Please elaborate. The theme is ***Definition of BL***, the category that emerged within the context of this question was ***ambiguous***. Most of the respondents reported their definition without any association to number of class meetings, or percentage of instruction delivered online. The following quotes provided evidence of this category.

Interviewed Participant # 9 (Chemistry; 3 courses per year; 75% online; 15 meetings): "Hybrid learning is a modality where, part of the course material is presented in traditional fashion in a face-to-face setting on-campus. In the other part of the course the material is presented online, via the Internet."

Interview Participant # 6 (Sociology; 2 courses per year; 3 lifetime taught; 90% online; 3 meetings): "There's quite a broad variety of diversity of how people are engaging this, in how they're approaching it. So you might have people who are doing more teaching in the classroom than I am, right? More group activities together in the classroom and only assignments online or something like that. So I know there's lots of ways to do it."

Interview Participant # 7 (Nursing; 2 BL per year; 80 percent taught online; 6 meetings): "Part online, part face-to-face and I can't say I know any definition of the percentage of each, but if I were going, I would say this, it's probably something like for me at least like an 80%[online], 20% [on campus]."

Interview Participant # 3 (Mathematics; 0 BL per year; 2 lifetime taught; 60 percent online; 15 meetings): "Sure, blended learning to me is teaching and content driven instruction that is entirely done online and the requirement for students to attend at least one or two sessions on-campus for either extra help, review or examinations. The key word is they would be required to attend at least one. In my [experience], I have experience in two ways, with blended learning I've done [experienced], I have experience with having requiring students to meet with me once a week for an ongoing review of material, review of material that I would bring to the classroom and an opportunity for the students to ask questions about material that they wanted me to go over."

Some of the interview questions were informative and demographic in nature, and should be considered as they might affect the participant's course implementation process. Appendix I provides interviewed participant's self-reported BL teaching experiences their course demographics and design properties in a table. This table's properties include: Teaching content area, number of courses taught per academic year, tenure number of BL courses taught at SCCC, percentage taught online, number of meetings on-campus, number of years teaching at SCCC, and course identity.

Number of Courses Being Taught

IQ3: In a typical academic year, how many blended learning courses do you teach? When participants reported the number of BL courses being taught per year as zero, they were then asked to provide the number of BL courses taught during their tenure at SCCC. There were three participants not teaching BL courses at the time of the interview, but had taught them in the past. Two were self-reported adjunct professors and one was self-reported as a full-time professor. All other participants were teaching at least one BL course at the time of this interview (See Appendix I).

BL Course Identity and Rationale

IQ4: Which courses do you teach in a blended learning format? Is there any particular reason why you've chosen to teach these specific courses as blended? Appendix I provides the identity of courses reported as taught. The data analysis resulted in an overarching theme ***Rationale for Blended Learning Environment*** with three categories: ***Academic integrity***, ***institutional need*** and ***social aspect of learning***. A few participants had self-reported concerns about academic integrity.

6 (Sociology; 2 BL per year; 90% online, 3 meetings): “Ah you know, I’m torn, I’m torn because the initial idea: I remember that I was starting to say that um [pause] they had asked me to teach online and I had hesitation for academic integrity purposes. Um, it seemed difficult to know if you’re giving an exam who’s going to take that exam.”

Interview Participant # 7 (Nursing; 2 BL per year; 50% online; 6 meetings): “Two meetings are used for on-campus exams, which I wanted to use to balance against my four online quizzes. Because it’s an elective course, you know, of course in every course you always have a concern about test integrity.”

The data analysis provided a second category for ***rationale for the blended learning environment*** as ***needs of the institution***. The following source text provides evidence of this category.

Interview Participant # 5 (Computer Science; 2 BL taught per year; 50% online; 15 meetings): “One of my colleagues could not teach the class, so I was given that class at the last minute.”

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online, 15 meetings): “It was a departmental decision. Someone else was teaching it and then retired, so I took over the course.”

Participant # 6 (Sociology, 2 BL per year; 90% online; 3 meetings): “And it was more of a need of the institution. Cause, I’m not opposed to doing it for other courses but that’s the one that I teach the bulk of.”

Participant # 9 (Chemistry; 3 BL per year; 75% online; 15 meetings): “This semester I’m teaching two sections of the hybrid, due to some scheduling issues that occurred.”

The last category emerged as some of the instructors reported selecting a BL format because of the ***social aspect of learning***. This theme is reflected in the following quotes.

Participant # 8 (Nursing; 2 BL per year; 50% online; 7 meetings): "I think that the social learner and that connection piece, that distance is just something that you have to overcome. And being both a student and a professor I get that."

Participant # 2 (Business; 2 per year; 50% taught online; 15 meetings): "Like I said [in a previous answer], I try to stress social skills and team work in the activities. They always have to work in one group. They have to communicate with one another before they arrive at one answer for the group, on the activity. And it also gives me a chance to interact with them on a regular basis. In other words, to explain anything that they need explaining, whether its homework, lecture points or whatever."

Percentage Taught Online

IQ5: What percentage of your blended/hybrid course is taught online? The range for percentage of course being taught online was between 50 and 90 percent for interviewed participants. The mean was 64.5 % of content taught online. The mode was 50 and median was 60. See Appendix I for detailed participant's self-reported data.

On-campus Meetings

IQ6: How often does your blended/hybrid class meet on-campus in one semester? What reasoning did you use to determine the number of meetings in each environment? The third theme ***BL Design Schedule*** emerged with two categories ***frequency of on-campus meetings***, and ***frequency of on-campus meetings rationale***. The range of reported frequencies of on-campus meetings was 3 – 15 per semester, with a mean of 11, mode of 15 and median of 15. The details may be viewed in Appendix I. The following

self-reported data addressed the second category ***frequency of on-campus meetings rationale.***

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "It was actually pre-determined for me. I guess some who have taught it in the past have scheduled it to be one day a week and then the rest online, and so when I took over it was just set up that way. I think any less face-to-face might be more difficult for those topics, it might be more difficult for the students to do the work."

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): "In both instances when I taught a blended course, I was not the person who developed the structure of the course."

Participant # 2 (Business; 2 per year; 50% online; 15 meetings): "Well I first tried meeting every other week and that was too hard. The students couldn't get into a rhythm they constantly forgot which week we were having class. So I switched it to every week one day a week and that was enough of a rhythm that they could get into it and that's where it's currently at."

Participant # 9 (Chemistry; 3 BL per year; 75% online; 15 meetings): "So for this course the students attend lab, so they perform experiments, and anything that they would, any type of information that they would have gotten during a lecture is delivered online."

Degree of Contact

IQ7: What do you think about the degree of contact that you have with your students when teaching a blended course? The categories that emerged from the fourth theme

Degree of Contact included ***increased contact***, and ***frustration***. Many reported increased contact with students in a positive way.

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online, 15 meetings): "I liked it, and I liked having that recitation time. One of my worries going into the course was that I would only be seeing them once a week. And if they were having problems or if they were out sick for that one week, it was too long a stretch to deal with problems that would come up. You know if students were having difficulty with the work or whatever. So having the recitation was absolutely incredible because I quizzed them, every week. And we could go over the answers and we could see where the difficulties were. So, it was, it was really good."

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "There was one student and it always stands out to me. A student said that I seemed distant [course evaluation] as I was teaching it [the course] and that really made an effect on me. It really [pause], it made me think like am I really just going in there robotically and they just forget me for the week? So, I try to get them involved a little bit more, try to get to know their names and call them out and talk to them so they'll know me a little bit more, so I don't seem as distant. But I think once a week, that's why I said any less than once a week, I think you lose that. I think you lose having the professor – student relationship that you do in a regular class. But that always stands out to me when I read that "she seems distant but she's really nice" so I try to change that."

The second category that emerged within this theme was ***frustration***. Some participants reported the experience of frustration. The following participant sources were exemplars that supported this category.

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings): "It was enough time to meet with [students], there was enough time to allow for me to get to know the students and I'm just not sure it was enough time for them [students] to get to know what my expectations were."

Participant # 5 (Computer Science; 2 per year; 50% online; 15 meetings): "It really depends on the student, at the time anybody could have registered for this class, and some students the mature dedicated ones, it worked out well for them, but for many of the students they signed up to it [blended learning course] not knowing that it would have this online component and it was a level of frustration [for both instructor and student]."

Instructor Role

IQ8: How do you describe the role of "teacher" or "instructor" in a blended learning course? Please elaborate. A fifth theme emerged as ***multidimensional role*** in the context of a CC instructor teaching a BL course with categories ***facilitator or guide***, ***time manager of students*** and ***same in the traditional face-to-face***.

Participant # 1 (Prefer not to say, 0 BL per year; 80% online; 4 meetings): "A SUNY SLN workshop explained that teaching was moving to the 'guide by the side' model."

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings); "Our role is to facilitate learning and to guide the learning that's taking place and to help students determine whether they are on track to complete the material."

The second category that emerged within this theme was ***time manager of students***. Respondents described their experiences in the following ways:

Participant # 2 (Business; 2 per year; 50% online; 15 meetings): "First of all just remind them that they're in the course, and that they need to do work; freshmen and

sophomores are less driven, less disciplined, might the word be not so great with time management?"

Participant # 3 (Mathematics, 0 per year; 2 tenure taught; 60% online; 15 meetings): "Community college students need help organizing their workflow, and meeting course work submission dates, they need to be reminded constantly about what is due and when."

Participant #10 (Mathematics, 2 BL per year; 50% online; 15 meetings): "I do help them organize a bit more in that class. I help them set-up portfolios, I help them set-up a way to do their online portion and get a bit more organized. I give them guided notes to fill in as they are reading, and I try to keep it the same every week."

The last category that emerged from the self-reported data was ***same in the traditional face-to-face***. The following quotes from the data supported this category.

Participant # 2 (Business; 2 per year; 50% online; 15 meetings): "I think basically it's the same as in any other course. You're in charge the one who plans and directs any activity whether it's reading or homework or activities or tests or whatever or evaluating what the students do."

Participant # 5 (Computer Science; 2 per year; 50% online; 15 meetings): "Same as a traditional course or an online course, pure online course. The teacher is a facilitator guiding the student through different learning activities."

Interactions with Students

IQ9: How do you feel about your interactions and connecting with students when teaching a blended learning course? The sixth theme ***interactions*** emerged with three

categories ***establishing relationships***, ***student voices***, and ***more connected***. Respondents described how and why they establish relationships with students.

Participant # 7 (Nursing; 2 per year; 80% online; 6 meetings): "I also wanted to meet them on the first day. So that we could go over expectations and make sure everyone is clear and that we actually meet and greet each other in that format. We have faces to go along with our online presence [smile]."

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime BL at SCCC; 80% online; 4 meetings): "A blended course provides the opportunity to engage in an "excellent" level of contact for both the online and in-person components. People are social beings. We crave interaction; therefore, traditional classroom interaction has been a part of fulfilling this need in people since antiquity. By extension, the online environment allows for the thoughtful expression of the written word, also fulfilling a need for interaction, or perhaps more accurately "connection" with others."

The category of ***student voices*** emerged from a few sources within the data. Exemplars of this data are provided in quotations.

Participant # 6 (Sociology; 2 BL per year; 90% online; 3 meetings): "We have online discussions, and so through that I know them and I get to know more about them and I see how they're connected to the materials… ah, but it does feel distant."

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online; 15 meetings): "I would give them prompts of some kind, and then they would go after whatever that prompt was and then respond to each other. So, it, when it worked best is when they were leading the chase."

Participant # 9 (Chemistry; 3 BL per year; 75% online; 15 meetings): “For each exam one of their assignments is to make up an exam as if they were a teacher and they had to make an exam. That’s one of my methods to get them to study. So I get to see how they think. You know when you ask somebody to create an exam you can basically see how they’re thinking. You know they can’t use questions from the back of the book. They have to use the PowerPoint slides, or read the textbook and make their own questions. I don’t do that with the traditional students.”

Being ***more connected*** to students also emerged as a category from the self-reported data as evidenced by the following participant quotes.

Participant # 8 (Nursing; 2 BL per year; 50% online; 7 meetings): “I think it’s the best of both worlds. Um, because [pause] I get more contact and less stealth students in a blended course than in a regular classroom based course. We teach classes that are in a lecture hall, and we have a large number of students. So, typically at the, as the course progresses, especially when students are experiencing difficulty in the larger class, they tend to start to hide. They start to miss classes, they start to not respond, if you ask them “please stay after class because I need to touch base with you a little bit.” And we call them our stealth students. They kind of try to stay under the radar as much as possible, and they find themselves in trouble towards the end. When you’re in a blended course it’s much more contact and if a person started doing that it wouldn’t get past a week or two before you could intervene. Cause it’s kind of clear in the course outline that they have to participate.”

Participant # 9 (Chemistry; 3 BL per year; 75% online; 15 meetings): “You know when you have a discussion board and you know you’re reading students’ posts and

things like that you're more connected. You know like for my, for my hybrid course the first discussion board post is introduction, and they have to state what their major is, why they've taken a hybrid course, have they ever taken a hybrid course before. I get to know a little bit more about all my students. I don't get that with the traditional course because I don't do a discussion board with a traditional course."

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80% online; 4 meetings): "A blended course provides the opportunity to engage in an "excellent" level of contact for both the online and in-person components."

Technology Knowledge Required

IQ10: In your opinion, what level of technology knowledge is required for teaching a blended course? Please explain. For the seventh theme ***technology skill required***, the category **average technology skill set** emerged from the source texts.

Participant # 7 (Nursing; 2 BL per year; 80% online; 6 meetings): "I think that to do it well, I think people have to have a great level of comfortability with the basic like Microsoft Word stuff. Like you need to know how to make enhanced PowerPoints."

Participant # 3 (Mathematics; 0 BL per year; 2 lifetime taught; 60% online; 15 meetings): "While I mean you should certainly have competence in utilizing the course management system that is supported at the college and in addition to that you know being competent in types of technologies that would support instruction. Many times that may be an app or it could be a website. But for that you have to, there's a couple of things that you have to be able to do. You have to set up the curriculum items, you have to navigate it you need to direct students every, you can't just ask students to go to our website. That's not good enough, so you need to tell students how to use it where to go

and you know try to help them understand whatever it is that they're having trouble with."

Participant # 2 (Business; 2 per year; 50% taught online; 15 meetings): "All I need to do this is general computer knowledge and the knowledge of the course software."

Perceived Technology Skill

IQ11: Describe your level of technology skill? The eighth theme emerged as ***Perceived Technology Skill*** producing two categories ***avid***, and ***independent learners of technology***. Many participants had self-reported avid technology skill sets.

Participant # 6 (Sociology; 2 BL per year; 90% online; 3 meetings): "[laughing] I mean, you know I still have room to learn, but um, and I think that I probably have fears or apprehensions like most people, but I don't usually let them hold me back. So I just kind of get in there and get dirty and I'm not afraid to ask questions. I bug my colleagues all the time with questions, so I usually figure things out. If not going for professional help, I google and I look for Bb help and I can usually figure out whatever I need to figure out."

Several other participants reported being ***independent learners of technology.***

Participant # 9 (Chemistry; 3 courses per year; 75% online; 15 meetings): "I don't think in this world one can ever say that they're an expert because technology is constantly changing and growing and if you don't stay up on it, you'll just fall by the way side. I'd say above average. Above average and open minded, and ah [laughter] you know [pause] I could learn anything, I just go on YouTube or something and learn anything, you know anything. Or you know a new type of software comes out and all

you have to do is just watch a video and you can learn how to use that software. If you can spend the time and sit there you can learn it."

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online; 15 meetings): "I would not say that I'm a wiz at it, but I do, if I have to do something I learn it. I taught myself Photoshop."

Teaching Blended Courses

IQ12: In your opinion, what, how and why does teaching blended learning courses work or not work? Please elaborate. The ninth theme ***BL What Works*** produced three categories from the data as ***self-governed students***, ***flexibility***, and ***engaging students***.

The first category ***self-governed students*** was reported by some of the participants as contributing towards having taught a successful blended learning course.

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): "The blended format works for everyone who is ready, willing, and able to participate in the intended course of instruction."

Participant # 3 (Mathematics; 0 BL per year; 2 tenure taught; 60% online; 15 meetings): "So I think blended courses work really well for motivated students, students that are independent learners and students that see the value in learning through a hybrid course, as opposed to a traditional on-campus course. The value is independent study, there's a lot of value there where a student has to utilize a deeper level of thought to learn and understand material and also has to seek assistance when they encounter an activity that they don't understand."

Flexibility was a second category that emerged from the data. The following exemplars support both theme and category.

Participant # 5 (Computer Science; 2 per year; 50% online; 15 meetings): "From my own experiences one of the benefits of hybrid learning from the student's perspective is that they're not chained to the classroom, as much many students have outside commitments whether it be that they have children or whether they have to take care of an ailing parent, or that they have other commitments that they have to fulfill such as a job."

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online; 15 meetings): "Well, I think the fact that the students don't have to be on campus, the flexibility structure is important. And I'm kind of repeating some of what I said before, uh with the lives that they lead being on campus one day a week is really, maybe a plus for them. And there were a few of my students who were actually students at other schools and they would come and they were able to pick up anatomy and physiology because it only met on Wednesdays."

Some participants reported ***engaging students*** as a contributor to what, how and why teaching BL courses worked.

Participant # 6 (Sociology; 2 BL per year; 90% online; 3 meetings): "From the teacher perspective, why it does work well I think with the overlap is that I can perhaps connect with the students that I wouldn't have been able to otherwise in a face-to-face situation. And I think there are a lot of innovative things that you can do. And I mean it's not that you couldn't do them in the classroom together. Like you could work in a computer lab and do some of these same things. You're having them write a blog or something like this. But, I guess in the same way that it benefits students to do them [course work] on your own time, it also benefits me to do them [course work] on my own

time too. So it's a little bit less on my feet lecturing. Right? And it's a little bit more like I was saying before ushering them, or orchestrating them [smiling]. There's something neat about that. I don't know how I can put it into words [pause], but there's something satisfying about [pause], mentoring might not be the right word, but sort of um, working with students to achieve those things you know with more of their own engagement."

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online; 15 meetings): "I think the questions, [pause] my emphasis on questions also gave me a chance to rethink my goals in teaching and uh get them to [pause], to be more involved in looking at what they don't know and pursuing that information. And I really think that that's the basis of learning. And you can get into a trap with anatomy and physiology in particular "okay now go home and memorize these bones, and memorize these muscles," but it's more than that, it's an understanding."

Participant # 7 (Nursing, 2 BL per year, 80% online, 6 meetings): "Okay, um I think the [pause], an overriding element is presence. That you need to be communicating with students frequently, you need to design the course in a way that actively engages the student on a weekly basis so that there's communication on the discussion board [etcetera]."

What was reported for the tenth theme ***BL what doesn't work*** were three categories that included ***lack of opportunity to teach***, ***administrative support*** and ***effective classroom practice***.

Some interviewed participants reported a ***lack of opportunity to teach*** blended learning courses.

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): “I am low on seniority, therefore, the opportunity arose only twice in 26 years of teaching adjunct/overload at this college.”

Participant # 2 (Business; 2 per year; 50% taught online; 15 meetings): “It is open for the spring [smiles] so I have hopes of getting it for the spring (2016).” Meaning that the BL course she is certified to teach will run in the spring and she might have an opportunity to teach it if other full-time instructors are not available to.

Within this theme the category ***administrative support*** emerged from the data.

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings): “I think the way we schedule blended courses here and the way we designate them here at the college may not be ideal. For example, we call a blended course a course that meets on campus at least once we designate that a blended course.”

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): “I’m trying to get an Intermediate Algebra Class running but, I haven’t gone through the whole process of, you know how you have to introduce the new class then get it approved through the DEC and Office of Instructional Technology so I haven’t done that yet.”

Participants reported ***effective classroom practice*** as being an issue for teaching blended learning courses.

Participant # 9 (Chemistry; 3 courses per year; 75% online; 15 meetings): “Okay, so I have to really figure out when I meet with my students once a week how can I make the best of that time that we spend together? Because not only do they have to perform an experiment, you know we have to discuss any issues that they’ve had online. Like if there’s technical problems, you know? How is the homework this week? Do you have

any questions? I'll call each student up, I'll log into the discussion board and I'll ask them why they haven't participated, or I'll log onto the homework problems."

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings): "So I would say in my experience the way I had originally planned [pause]. I would say it was 60% online if not greater. And the reason that I say that is because I did some testing in the class when we met and I had some content that I was bringing to the table. But there was also other content that students would ask to, depending, [pause] to review on what they found challenging. So student A would ask about one topic that they found challenging, where student B did not find that topic challenging, but would ask about something else. So that content really only applied to that one student."

Participant Recommendations

IQ13: What recommendations would you give to other instructors who are considering teaching blended learning courses? ***Recommendations*** for new to online teaching faculty yielded three categories ***professional development***, ***course design*** and ***students' technology skills***. Many of the faculty members interviewed recommended participating in professional development workshops for blended or online learning environments.

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): "Attend professional development addressing best practices for online teaching. It is the online component of teaching that will require "rethinking."

Participant # 7 (Nursing; 2 BL per year; 80 percent taught online; 6 meetings): "Get some formal training on the online pedagogy, there are techniques that you know are, are very well known to work and they do work. And you have to have engaging materials,

you can't use the questions from the back of the chapter, that they've seen already on your discussion board, you know you, um. I find more effective things where I, you know I insert an article for them to read and comment on with certain questions that I'm asking them, directed you know, or a video. That I ask them to watch a video, a short video."

Participants also recommended considerations towards ***course design***.

Participant # 2 (Business; 2 per year; 50% taught online; 15 meetings): "Well you have to carefully think out what you want to put online and what you want to do in the classroom."

Participant # 8 (Nursing; 2 BL per year; 50% online; 7 meetings): "My advice to them, don't think of it as just throwing a bunch of lectures online, and a discussion post, and that you have to think about your learning activities to be more than that. Um, but quite honestly, there's [pause], once the [pause], it's not so much the technology it's [pause] it's changing how you approach the student. I think is the biggest barrier."

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "The first time I taught a hybrid class I had maybe half of the class failed. And it was just a complete disaster. And I said, is it the students? Is it me? Let me change stuff around what worked? What didn't work? So I've changed my class and then like I said finding different software that works. I've probably changed my class four times already. Until, I finally found a system that works with how I teach and for that particular class as well."

The category ***student's technology skills*** were suggested to be part of considerations made when designing BL courses.

Participant # 6 (Sociology; 2 courses per year; 3 lifetime taught; 90% online; 3 meetings): "I would say to reserve yourself from making a lot of assumptions about (1) their knowledge about being a college student, you know the responsibilities of being a college student, but (2) assumptions about their technology savviness too. Because I know it's [pause], you know millennials, millennials, millennials, everybody's talking about them growing up with technology, but they know social media. I don't know that they know Bb. And I don't know that they want to try to learn Bb either [laughing]. So, I don't think that we should make any assumptions about that students have this aptitude or something that just lets them do this. I think that can be damaging because if we're not laying it out for them, if we're not giving them step by step and ushering them along it's really easy to get lost. And fast. Yeah, and so the assumptions, I mean try to walk in with no assumptions about their abilities to begin with."

Blended Learning Community College Student

IQ: 14: In your opinion, why does/doesn't blended learning work for community college students? The respondents mostly reported on what does not work for community college students. However, a few addressed what worked. The twelfth theme ***Working for CC BL Students*** with three categories ***academic skills***, ***motivated students,*** *and* ***flexibility towards student needs*** were key areas.

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): "I believe that students' writing and research skills improve at a faster pace because there are typically more written assignments included in the online component, as compared to a traditional classroom format."

Most participants self-reported BL worked best for the ***motivated students***.

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): “It works for students who need a flexible schedule. Maybe I should rephrase that as it works for motivated students who need a flexible schedule. It works for them.”

And many participants discussed the ***flexibility towards student needs*** in blended learning when considering course work and scheduling.

Participant # 4 (Biology; 0 BL per year; 7 tenure taught; 60% online; 15 meetings): “Well, I think the fact that the students don’t have to be on campus, the flexibility structure is important. With the lives that they lead being on campus one day a week, is really [pause] maybe a plus for them. And there were a few of my students who were actually students at other schools and they would come and they were able to pick up anatomy and physiology because it only met on Wednesdays. It made it possible for them to be part of it, so the flexibility for them was a big thing.”

Participant # 2 (Business; 2 per year; 50% taught online; 15 meetings): “And I would just repeat what I said about I feel that some interaction and connection on a personal one-to-one, not necessarily one-to-one, but presence, physical presence is necessary for many of Suffolk's students.”

Three categories emerged from the data regarding the thirteenth theme ***Not Working for CC BL Students***. They were ***student misconceptions about BL***, ***students not motivated or engaged*** and ***unprepared students***.

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings): “Their interpretation, the interpretation the students had, of what the hybrid course was, was different from the interpretation of what my definition was. So it gave a false

impression that meeting me once a week was sufficient to learn all of the material in a two-hour meeting that we would've expect in a four-hour meeting."

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "It's definitely not the same as in a lecture course. I find that students find it easier to skip class, because they don't feel that connection with me so, I do have by mid semester just fewer and fewer students showing up."

Participant # 6 (Sociology; 2 courses per year; 3 lifetime taught; 90% online; 3 meetings): "I don't know if it's the same at 4 year institutions or not, but I have a general concern that there is a perception that online or blended learning is easier."

Participant # 9 (Chemistry; 3 courses per year; 75% online; 15 meetings): "I think for some of the students they're not aware of the time investment, the amount of responsibility that is on them for online learning in a hybrid course. The majority of my students have never taken a hybrid course before, some have but for the most part those that are in my course have never taken a hybrid/online class before. So I think they're taken by surprise. I want to back up to the last question because this is related to it, I warn my students, I send out two or three emails and I outline what's required of them for taking a hybrid course. And I don't think that they pay attention to it. I think students might look at a hybrid course as a way of getting over, as a way of just not having to show up and they think that they're going to slide through when it's not like that. As a matter of fact, they probably have more work than, not. Probably, no they definitely have more work to do in a hybrid course than they do in a traditional course. They have many more requirements, they have to read the text, they don't have anybody explaining the

materials to them, unless I schedule a Blackboard Collaborate virtual session, which I do. And I think some of them are lazy."

Exemplar's that support the category of ***students not motivated or engaged*** follow.

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "The part where it doesn't work is mostly with the students who are not motivated. And that was the problem with that first semester [I taught a BL course]. Where, almost more than half the class failed. Because I would set up an online activity and that was it, they had no motivation to do it. There was nothing that I had, no software that I had that forced them to do certain things."

Participants also reported that students were ***not prepared*** to take BL courses.

Participant # 5 (Computer Science; 2 BL taught per year; 50% online; 15 meetings): "Unfortunately, I want to say here at Suffolk I have seen students take the classes, hybrid classes where they were not prepared to take the class. And that set them up for a very severe disappointment. "What do you mean I have to have a computer outside" [voice changed tone] and I do tell them here at the library we have the facilities and that they can use the computers, but they don't want to come back on campus to do the work."

Blended Learning Experiences

IQ15: What experiences have contributed towards your choosing to teach in a blended learning format? If you choose not to teach in a blended learning course, please describe your experience(s) stating why you don't. There were two themes that emerged for choosing to teach BL courses; ***Flexible Schedules*** and ***Learning Environment***. The categories for ***Flexible Schedules*** included ***instructors*** and ***students***. The categories for

Learning Environment included ***teaching experience*** and ***instructional technologies***. To following quotes supported the category of ***instructors and students***.

Participant # 10 (Mathematics; 2 BL per year; 50% online; 15 meetings): "One of the reasons I chose to do it was also for the flexibility. I also wanted a flexible schedule. It was a lot of work at first because I had to find something that works, so even though my schedule was more flexible I still had to put in the work at other times. But now that everything flows, or I feel works for that course the way I have it set up, I personally enjoy the flexibility. But you do have to be flexible with the emails that come in at 10 o'clock at night; and you know, even though I tell them I'm not going to answer anything unless it's between 9-5pm, I still find myself responding at 11 o'clock at night to them if they email me. So, the flexibility is good."

Participant # 6 (Sociology; 2 courses per year; 3 lifetime taught; 90% online; 3 meetings): "I myself will dabble in online courses. I'm not in the accredited courses, but you know Coursera or some universities offer courses. Right? That are not for credit? But, so I, I do you know? I, I'm in them as a student often and I see the utility and the usefulness and recognize the need too and um in students.

The second theme ***learning environment*** offered two categories, the first emerged as ***teaching experience***. Quotes are provided to support this category.

Participant # 7 (Nursing; 2 BL per year; 80 percent taught online; 6 meetings): "I also teach the same course face-to-face. So when I designed the course as blended versus fully online, it was because I know there's great variance in student's math abilities and the need for more instructor attention. And I wanted to provide that connection to myself. And a good portion of that is because I've been teaching the course a long time,

and the biggest hurdle for most students is just plain old math anxiety. So, being able to connect with me face-to-face; where I do my usual thing and when like I teach in traditional [classroom], which is mostly anxiety control. So I can do that with blended rather than just with fully online. You know the personal connection that you have with your students adds to the learning. And I think that would go with any course but, in particular my course because of that anxiety issue it's the difference. Once I get them to just do ratio proportion and really own it, they're okay."

Participant # 1 (Prefer not to say; 0 BL per year; 2 lifetime taught; 80 percent online; 4 meetings): "My extensive experience teaching online contributed to my being able to transition into a "blended" course."

The second category that emerged was ***instructional technologies***.

Participant # 9 (Chemistry; 3 courses per year; 75% online; 15 meetings): "Well I had um, I worked as a [tutor], when I was in graduate school, I worked as a tutor. And I was tutoring science courses, math, biology, chemistry. And at that time, I'd tutor students that were taking online courses. So I was introduced to online learning at that point. So I became interested in the online learning process. And then when I started teaching I started using online platforms that accompanied the text book, so I was introduced to that technology in my discipline. Now I never took any online courses. But I was introduced to that technology when I was tutoring and when I started teaching. Over the years that I've been teaching I've seen the technology grow, expand. I've attended conferences, in regards to institutional technology and online learning and I've met with publishers. So I saw the usefulness of the modality. I actually did a lot of investigating in this area. I couldn't believe how many institutions were using online learning, worldwide. It's

amazing. I'm open minded to technology. I love technology and all of this stuff kind of fostered my growth in that area. And I don't think that every course is suitable. I mean certain aspects of it, but I don't think every course should be totally online. Any course now, I mean every publisher now. I mean I don't know if it's any publisher, maybe there are publishers that aren't supporting online content, but I think every publisher I know of has some kind of online platform to accompany their textbook."

Participant # 8 (Nursing; 2 BL per year; 50% online; 7 meetings): "I think that a lot of the changes in the health care environment supported it. Because, what we saw was in, in um, in the institute of medicine what they were looking at in nursing education was that they felt that it was very important to have this bridging on professional levels going from the LPN to the RN licensure. And concomitantly, we were having an explosion of the use of technology. So by having them cross that bridge, using technology helps to improve their computer literacy, and their information literacy. And that was a, and important requirement for their, housed professional practice. So I thought it was just a really good marriage of things. So I found that, a big advantage. And when people are doing this course their varied work backgrounds, some of them worked in hospitals, some of them worked in doctors' offices, some of them haven't worked at all, some of them have, they come from a variant background. So it gives them an opportunity for them to self-assess individually on what they need to work on to achieve the outcomes that we want to achieve in this course, so that they're ready to move on to the senior level of these courses. So the portfolio portion of this course is very helpful. And it's a good match for blended learning."

To address the second half of the question, one example is offered as all other interviewees chose to teach BL courses.

Participant # 3 (Mathematics; 0 per year; 2 tenure taught; 60% online; 15 meetings): "Moving forward I'd prefer to teach. I mean if I'm going to teach an online course you know a distance education course either online or blended I would select an online course. Strictly online, I think the blended approach works well in a support fashion. So I will use, or I would apply the blended model more towards a traditional course where I still have the material online for the students. But rather than keep expecting the students to learn the material [pause to think] if I were to meet the students, I think I prefer to teach the students everything myself."

Emerging Themes and Categories

The data were analyzed using a systematic structural and descriptive coding approach (Saldaña, 2013). "Structural coding applies a content-based or conceptual phrase representing a topic of inquiry to a segment of data that relates to a specific research question used to frame the interview" (MacQueen, McLellan-Lemal, Bartholow & Milstein, 2008, p.124, as cited by Saldaña, 2013, p. 84). "Descriptive coding summarizes in a word or short phrase – most often as a noun the basic topic of a passage of qualitative data" (Saldaña, 2013).

There were five research questions and 15 interview questions. The five research questions were used as the structures and the 15 interview questions acted as categories that became themes (Saldaña, 2013). Within these themes sub-codes emerged into categories of the themes (Saldaña, 2013). In total, there are 15 themes and 32 categories that emerged from the data analysis (see Table 13).

Table 13

Themes and Categories

Theme	Category
1. Definition of BL	Ambiguous
2. Rationale for BL environment	Academic Integrity, Institutional Need, and Social Aspect of Learning
3. BL Design Schedule	Frequency of On-Campus Meetings, and Frequency of On-Campus Meetings Rationale
4. Degree of Contact	Increased Contact, and Frustration
5. Multidimensional Role	Facilitator or Guide, Time Manager of Students, and Same in Traditional Face-to-Face
6. Interactions	Establishing Relationships, Student Voices, and More Connected
7. Technology skill required	Average Skill Set
8. Perceived Technology Skill	Avid, and Independent Learners of Technology
9. BL What Works	Self-Governed Students, Flexibility, and Engaging Students
10. BL What Doesn't Work	Lack of Opportunity to Teach, Administrative Support, and Effective Classroom Practice
11. Recommendations	Professional Development, Course Design, and Students' Technology Skills
12. Working for CC BL Students	Academic Skills, Motivated Students, and Flexibility Towards Student Needs
13. Not Working for CC BL Students	Student Misconceptions About BL, Students Not Motivated or Engaged, and Unprepared Students
14. Flexible Schedules	Instructors and Students
15. Learning Environment	Teaching Experience and Instructional Technologies

This section provides a summary of each theme and corresponding categories. Analysis of responses collected relating to content area and description of BL resulted in the theme *Definition of BL* and one category, *ambiguous*. When asked about BL experiences and specifically to define what blended learning meant to them, respondents did not provide details and many lacked confidences in their descriptions of BL. An example of this uncertainty is found within the following response:

> For arguments sake, I would say that it is a course section where more than 50% of the content is provided via online course system. Clearly this definition exists on a continuum. Traditional courses are web enabled. I am not sure where the line of demarcation exists. Therefore, I will go with the tipping point – 50%? Is there a definition for this?

The second theme, *Rationale for BL Environment,* is directly connected to why faculty members chose to teach in a blended learning format. The categories within this theme include *academic integrity, institutional need* and *social aspect of learning*. Academic integrity was defined as a category that identified participants' concerns regarding student authentication with test taking. Institutional need was commonly reported and described by participants as providing BL courses to the institution to meet the diverse needs of the student body. Participants described social aspect of learning as an element that would not be as easily created in a fully online course and something that participants deemed necessary for creating a successful learning environment within their courses.

The third theme *BL Design Schedule,* includes two categories *frequency of on-campus meetings,* and *frequency of on-campus meetings rationale*. Participants mainly offered

numerical values for their response when asked about the frequency of on-campus meetings [see Appendix I]. When asked about their rationale for the number of meetings, most reiterated their rationale for teaching in a BL environment or expanded upon a version of it. The two categories were connected yet independent of each other. As quotes indicated in *Percentage Taught Online* within this chapter.

Degree of Contact emerged as a fourth theme with two categories, *increased contact*, and *frustration*. Most participants reported experiencing an increase in the amount of contact they had with students. While a couple reported experiencing frustration with their degree of contact.

Multidimensional Role was identified as a fifth theme and includes three categories: *facilitator or guide*, *time manager of students* and *same as in traditional face-to-face*. Almost all participants reported their roles as being a facilitator or guide. Most expanded upon that to include being a manager of students' time to meet course requirements and some reported the BL environment role as being the same as when they teach traditional on-campus face-to-face courses.

Participants were asked how they felt about their interactions and connection to students when teaching a blended course. Analysis of these data resulted in the sixth theme, *Interactions*. Within this theme, three main categories emerged as *establishing relationships*, *student voices* and *more connected*. Participants felt that the BL on-campus portion of the course lends itself to allowing students and instructor the opportunity to establish more robust relationships. All participants offered experiences that allowed them to interact with each student on an individual level. Although some made it a point to expand upon their report and identify more in-depth interactions with

students in general and with those students they normally would not have connected with in the face-to-face environment alone. Others added experiencing being "more connected" with their BL students.

Participants were asked what technology skill set was required for teaching a blended course. The seventh theme, *Technology Skill Required* emerged with one category, *average skill set*. Participants felt that there was no need to have above average technology skill sets when teaching in an online environment.

Participants were also asked about their perceived technology skill set, which resulted in the eighth theme, *Perceived Technology Skill.* Responses clustered around two categories including *avid* and *independent learners of technology*. Almost all participants reported being an independent learner of technology or at least having avid technology skills if not possessing both attributes.

The ninth theme is *BL What Works.* This theme includes three categories, *self-governed students*, *flexibility* and *engaging students*. When participants were asked about what worked in a BL environment, most reported self-governed students as being the most successful within the BL environment. While many reported it was the flexibility of the BL format that allowed for student success. Many also reported that the BL environment supported student engagement because it was easier for them to create and deliver more diversified content and learning activities.

The tenth theme is *BL What Doesn't Work,* with three categories including *lack of opportunity to teach*, *administrative support* and *effective classroom practice*. Many reported not having enough opportunity to teach BL courses. Others reported administrative issues such as scheduling and advertising these courses, and student

verification issues with the online portion of the course. Some reported a lack of effective classroom practices such as balancing the instructional blend and motivating students to participate in the online portion of the course.

The eleventh theme, *Recommendations* includes three categories *professional development, course design and students' technology skills*. When asked what they would suggest to others who are considering teaching BL courses, most participants reported the importance of attending professional development workshops prior to teaching BL courses. Many added the importance of the BL course design. The last category emerged from comments about technology skills and specifically that instructors should not assume that students' technology skill sets are at a level of what is required for success in the online portion of the course.

Working for CC BL Students is the twelfth theme. Three categories, *academic skills, motivated students and flexibility towards student needs* represent the participants' responses. Some reported student academic skill sets as improving in BL courses. Others reported BL working best for motivated students and most reported the flexibility towards student needs being what worked best.

The thirteenth theme is *Not Working for CC BL Students*. Three categories including *student misconceptions about BL, students not motivated or engaged,* and *unprepared students* represent participants' opinions when asked specifically why BL does not work for CC students. Participants reported how students think that BL courses were easier and by nature required less work due to their reduced on-campus seat-time. They also mentioned that many students enrolled in their courses were not motivated to engage and

do the work. Finally, participants stated that students show up to class unprepared to learn, participate and do not have the technology needed to participate from home.

When participants were asked what experiences have contributed towards their choosing to teach in a BL format two themes emerged *Flexible Schedules* (theme 14) and *Learning Environment* (theme 15). The category *instructors and students* emerged from theme 14 because it was reported by some that the BL environment afforded both the student and instructor a more flexible schedule. Theme 15 includes the categories *teaching experience* and *instructional technologies*. Many participants reported their teaching experiences both online and face-to-face courses as the reason for choosing to teach a BL course. Others identified the value of using instructional technologies for teaching their content as the main reason.

Summary

Chapter 4 provided the findings of the research results based upon the qualitative inquiry of the phenomenon of community college faculty dispositions towards blended learning. Thirteen themes and thirty-two categories were identified as emerging from the data analysis (See Appendix J). The majority of the participants reported positively on the BL environment. According to some, BL offers the best of both worlds for teaching. Many reported issues with administrative processes, support and student misconceptions of BL. Almost all participants were willing and eager to teach BL courses again. Several recommendations were made for new instructors regarding BL. These findings will be a factor in providing evidence-based strategies for teaching, designing and delivering BL courses, specifically to the SCCC community and to other community colleges.

Chapter 5 includes a discussion of the findings as they pertain to the overarching research question: *What is the disposition of community college faculty toward blended learning?*" and the five subquestions. Conclusions and implications are presented along with suggested best practices relating to BL in community colleges. Chapter 5 concludes with recommendations for future research.

Chapter 5

Conclusions, Implications, Recommendations and Summary

The goal was to understand the dispositions of the community college faculty towards blended learning. An exploratory, qualitative case study guided the investigation. The overarching research question was: *What is the disposition of community college faculty towards blended learning?* Five research subquestions were also addressed. In Chapter 4, the results from the open-ended survey and semi-structured interviews were presented. In this chapter, conclusions are presented and organized by the five subquestions. Implications and recommendations for future research are given. The chapter concludes with a summary.

Conclusions

What is the disposition of community college faculty towards blended learning? To gain context specific insights, conclusions are drawn from the data analysis using the five subquestions.

RQ1: How do faculty describe blended learning?

There were 13 reported content areas from the survey. Of which there were 25 percent self-reported participants teaching mathematics courses. Other areas reported less frequently included accounting, biology, business, chemistry, communications, computer science, health information technology, law, marine biology, nursing, psychology and sociology. All of the content areas being taught by the interviewed

participants were biology, business, chemistry, computer science, mathematics, nursing, and sociology.

While the descriptions of BL had similar attributes, these descriptions did not agree upon a specific percentage of course content being delivered online, or in the classroom. The majority of participants believed that there was no specificity for balancing the instructional blend. For example, an instructor might deliver 50 or 90 percent of instruction online and the balance of instruction would be taught in the traditional classroom.

When asked to elaborate on their descriptions, a couple of interviewed participants described blended learning as some system that functioned around their individual BL course design and delivery structure. Again, there was no mutual agreement found within those descriptions regarding the percentage of content being delivered online, not even within the same content area. Picciano (2016) reported a similar situation during an invitation only Sloan C blended learning workshop where the focus of the workshop was to establish a definition for blended learning. The result was participants could not agree upon a simple definition and the discussion circled around a broad and narrow definition without resolve.

SCCC has a definition of BL that is published and available to all faculty in the *Office of Instructional Technology and the Distance Education Committee Distance Education Guidebook* (SCCC, 2015). SCCC Distance Education Committee defines blended learning as: "Blended courses are courses for which some portion of the coursework is completed online and some portion of the coursework is completed on campus" (2015, p. 3). Responses very much reflected SCCC's BL definition. The combined reported data

for description of blended learning amongst CC faculty reflected what was described by Picciano (2014) when he noted that blended learning has no distinct definition, but rather it is a "…mixing and matching of face-to-face and online learning techniques and materials in their courses" (p. 1). In addition, it was reminiscent of Garrison and Vaughan's (2008) description "Blended learning is the thoughtful fusion of face-to-face and online learning experiences" (p. 5).

RQ2: How do Faculty Implement Blended Learning in the Courses They Teach?

To identify the ways that faculty implemented their BL courses, five interview questions were asked and identified in Chapter 4. A couple of these questions also verified the criteria for the case boundaries. Participants were primarily asked which courses they taught, what their reasoning was for teaching these courses, what percentage of the course was taught online, how often they met on campus and what they thought about the degree of contact they had with their students. These combined aspects resulted in describing how they implemented their courses.

The results as described in Chapter 4 offered insights to the answers. A few participants were concerned with academic integrity in the online environment and decided to develop BL courses so that they could deliver assessments on-campus. These interviewed participants reported this as a primary reason for choosing to teach BL courses instead of fully-online courses. These participants also met on-campus less than five times a semester. Their schedules aligned with their rationale for implementing a BL course.

The CC works to accommodate the needs of its diverse student body and BL is a way for them to meet this need. Some participants reported being asked by their department

chairs to fulfill a need of the institution by teaching BL courses. Faculty members reported being asked mainly because there were no other instructors qualified academically, or certified by SCCC to teach BL courses. In this instance, many reported using existing course outlines to implement the course. Only one participant who reported being asked to teach in a BL format also reported creating his/her own course outline.

The social aspect of learning was another rationale reported as being a deciding factor for the number of on-campus meetings, and the percentage of online instructional delivery. These instructors felt meeting face-to-face on-campus allowed students to form relationships with other students in a more personalized way. This resulted in a more harmonious online environment for their students when participating in activities such as discussion boards or group work. It also allowed the student to interact with the instructor embellishing their relationship and offered the instructor opportunities to clarify any ambiguities found within the online instructional portion of the course.

One participant reported confusion being associated with the rationale of how often a course met on-campus. Her/his belief was meeting less than once a week was too confusing for the students resulting in student absences. When analyzing reported data pertaining to scheduling, the analysis also showed meeting schedules had some connection to the content area being taught. For example, the chemistry course was reported as meeting 15 times to perform chemical experiments in the laboratory once a week and the nursing courses met bi-weekly for instruction. However, the percentage of instruction delivered online differed in common content areas such as nursing. Overall,

the survey and interview results showed the range of online instruction from SCCC faculty between 50 and 90 percent.

Participants that reported choosing to teach BL courses for other reasons created their BL course outline based upon an existing traditional outline. What emerged from the data through analysis was a logical approach to use when implementing a BL course:

1) First decide why the course was being taught in a blended format;
2) upon identifying the why, then choose the number of on-campus meetings; next
3) define the percentage of instruction being delivered both on-campus and online; and

   finally concluded by,

4) choosing the online content, learning activities, and assessments based upon course learning outcomes.

One respondent also reported implementing reflective practice and changing the course structure after teaching the course to improve upon the blend.

Most respondents reported positively about the degree of contact with students. They felt that their level of contact with all students increased in a blended learning environment. For example, to quote one participant BL brought the "…stealth student into the conversation." Some felt that the question was addressing the type of contact that they had through learning activities, while others associated it with different methods of classroom management. Most of the interviewed participants' responses aligned with participants' survey responses for frequency of classroom meetings. Overall, there was an underlying theme that emerged from the interview data where more contact time

existed between instructor and BL students. Conversely, a couple of participants reported the degree of contact as being frustrating. One commented:

> It really depends on the student, at the time anybody could have registered for this class, and for some students, the mature dedicated ones, it worked out well for them. But for many of the students they signed up to it not knowing that it would have this online component and it was a level of frustration [for both student and instructor].

There were different approaches being used for implementing BL courses (number of face-to-face meetings, percentage of instruction delivered online, etc.). However, most of the implementations reported fit into Graham's (2009) category *Transforming Blends* and the *Replacement Model* as discussed in Chapter 2. "Transforming blends allow for a significant change in pedagogy that facilitates active learner construction of knowledge" (2009, p. 376). The "replacement model" reduces face-to-face meeting times and replaces them with online learning activities (2009, p. 378).

For example, one participant reported reducing on-campus seat time to once a week, and face-to-face instructional activities to 25 percent:

> Well the course organization is different. All right, so for the traditional course they don't, they're not doing lab simulations online, they're not doing discussion board assignments. For uh, for the hybrid students, I feel like I'm on top of them more. I want to make sure that they're engaged with the online materials, because it's such a major portion of their grade [75% activities and grade]. And there is an attendance policy in both modalities; and so part of my attendance policy has to do with them doing these online assignments. Like you'll see when you see my course outline.

Another participant reported reducing in-class meeting times to seven per semester, and further stated:

> When I think about how I'm putting stuff together, I think about developing activities that are really like in a portfolio class. Like things that they [students] need to develop on their own, providing those resources for them, um [pause]. So that they can use them, and at their own pace kind of go through the learning activities before the completion of the course. And then for the things where there needs to be debriefment and you know group activities that are better done face-to-face I do them in the onsite, with the onsite activities.

RQ3: How do Faculty Perceive their Roles in the Context of a Blended Learning Course?

Participants described the role of BL instructor mainly as being a facilitator or guide of learning. They described their roles to include managing students' time, being a conductor for establishing relationships, and finally, having the same role as in the traditional face-to-face learning environment. Faculty also described communicating more with students, establishing relationships with all students, gaining more in-depth insights to the way that students thought, and felt more connected to these students.

This perceived role was broad. The BL instructor is not simply a facilitator or guide of course content. According to participants, their role expanded beyond delivering lectures and expediting assessments. Blended learning instructors were self-reported relationship builders and managers of students; creating activities that are interactive in nature, engaging, relevant and motivating. In addition, respondents reported a dimension of their role was acting as student motivator, monitor and manager of student's work.

When asked about the required level of technology skill for teaching in a BL environment, most reported having average technology skills as being adequate. However, many reported their self-perceived technology skill set as being above average and claimed to have independent learning skills when pursuing new technologies.

RQ4: What problems do faculty face when implementing blended learning?

Most of the reported issues faculty faced when implementing BL courses were related to administrative processes. When asked to identify what was not working with BL within the CC, some reported a lack of opportunity to teach within the BL format. Instructors felt that there were not enough BL courses being offered, and that it was too difficult to get approval for teaching additional BL courses (new or existing).

The initial process for getting approval to teach BL courses at SCCC is set up so that first, an instructor first fills out an application; next, the form is forwarded to the academic chair. If approved, the form goes to the campus dean for approval. It is then sent to the distance education committee. Once the distance education committee receives the form a vote is conducted. If approved, training is scheduled for new to online teaching instructors. These instructors will then attend a semester long training program. This process may take more than three months for the SCCC BL certified instructor and approximately one year for the new to online teaching instructor who must become certified through training.

Secondly, instructors reported an issue with how BL courses are scheduled and advertised. One participant mentioned that many students are enrolling and not realizing that they have enrolled in a BL course, and they do not understand what a blended

learning course is, how it works, the type of technology required to participate and that they need independent learning skills to successfully complete the course.

A third issue reported by instructors was online student verification. Instructors wanted to know that the person who was participating in the online portion of the course was the student receiving credit for the course. At the time SCCC did not have a process or tool to assist instructors with this issue.

The last issue that was common amongst instructors was effective classroom practice. Many of the BL instructors reported having to use on-campus instructional time for troubleshooting student technology issues with the college LMS, the external publisher websites, with videos that do not play and browsers that do not work properly with the tools provided through the cloud-based products being used in the course. Some instructors experienced students not doing the online work and showing up to face-to-face sessions unprepared or expecting the instructors to review all of the content that should have been learned prior to attending class. They felt that they had to review the online work during the face-to-face session prior to moving forward with the course materials and they specified that they "did not do this" in their traditional courses. This student expectation was problematic as these issues made it difficult for instructors to meet the instructional delivery schedule that they designed. He, Gajski, Farkas & Warschauer (2015) also reported students having issues with time management in their study about their "flexible" hybrid model, but related it to the 'flexible' model itself.

Participants were asked to make recommendations for new to BL faculty. This question worked in two areas of this study, first to identify best practices and second to identify issues that instructors overcame when teaching BL courses.

The following is a list of their recommendations:

1. Attend professional development workshops. Because online instruction is very different from face-to-face instruction and designing the course requires a lot of "rethinking" it also requires the ability to implement a different pedagogical approach.
2. Do not use questions from the back of the textbook. This will work against you, as students may have already seen these questions in discussion boards or within the textbook.
3. Do use engaging materials. If using all text and flat image based learning materials students may become disengaged. Don't just move classroom lectures online, activities and materials need to be interactive to motivate and engage learners.
4. Use video and journal articles that are relevant to course outcomes. This helps to engage students.
5. Design the course carefully. Think about what learning materials, activities and assessments to deliver online, how to deliver them online and why they are being delivered online. Also carefully consider the same for instructional materials being delivered in the face-to-face learning environment.
6. Perform reflective practice each semester. Reflect upon what is working and what is not working in the course and change what needs to be changed based upon those reflections.
7. Make no assumptions about students' technology skill sets. They might be good at texting and downloading music, but that doesn't mean that they are

good at using Microsoft Office, other required software or the learning management system tools required to successfully complete the course.

8. Assist students with time-management. This will motivate students and assist with retaining students. This has been done using several methods: a course schedule that shows exactly when things are due may be placed within different areas of the online course, using an announcement LMS tool to send reminders of assignment due dates to students in advance, and using other LMS tools that assist with early due dates and student interventions (student has not logged in for x number of days, etc.).
9. Communicate with students regularly. Instructors must be present in their courses. This practice will help retain students.

The last interview question related to research question 4, which sought to discover what was not working for CC students enrolled in BL courses. Instructors reported students as having misconceptions regarding BL, that students were not motivated or engaged in the course, and that students were not prepared to learn.

Many reported CC students believed that BL courses would be easier. They thought that they could work at their own pace, and could attend class only when they wanted to, or that all instruction would be conducted in the classroom and no instruction would be online. Upon elaboration, this experience extended to include the lack of student motivation and engagement in all aspects of the course. One participant shared an experience, which led him to believe that not only did students think that BL courses were easier, but they had no conception of the time commitment that was involved for

learning online and inferred that some students enrolled thinking they would have more time for their personal commitments and responsibilities. When in reality, they did not.

RQ5: What Aspects of Blended Learning do Faculty Embrace and Why?

Instructors reported flexibility as a main reason for teaching BL courses. Flexibility in schedule for students offered reduced on-campus seat-time and afforded students access to learning 24 hours a day. For that reason, they might work without affecting their work schedules, take care of their families, or not have to worry about commuting to campus as often. This is also true for instructors. Instructors managed their course at whatever time of day that worked best for their schedules, and teaching BL courses reduced the number of hours that they spent on-campus.

The BL environment was reported as being an aspect embraced by faculty. Comments like "It's the best of both worlds" and "I love teaching blended courses," were reported by some. Nine out of the ten instructors interviewed said that given the opportunity they would teach a BL course again.

Many of the BL instructors also reported teaching fully-online courses. They contributed their success in the blended learning environment to these experiences. A few reported the BL environment as their first experience with delivering instruction online but attribute their success to having taught the course many times in the face-to-face environment. Delivering courses in both of these environments and being subject matter experts gave the instructors insights towards the pedagogical needs of their students, which is why many chose the BL environment over the fully-online environment.

The last aspect identified had to do with the use of instructional technologies. Based upon their experiences teaching, research conducted and program requirements, a few instructors felt that the BL environment aligned with their course learning outcomes. One instructor was conducting a five-year pilot on his/her BL course, and a couple of others had been delivering BL courses for several semesters to meet program requirements and would like to offer additional BL courses within their programs.

Implications and Recommendations

This study added to the BL body of knowledge by investigating CC faculty dispositions towards BL. While the scope of the investigation covered the largest CC in the SUNY system, generalizations are limited; however, many of the issues were consistent with studies found within the literature (See He, Gajski, Farkas & Warschauer, 2015; Graham, 2013; Napier, Dekhane & Smith, 2011; Ocak, 2011; Wang, Han & Yang, 2015).

The CC faculty defined blended learning in the same ways that have been described in numerous publications (See Graham, 2009; Graham, 2013; Garrison & Vaughan, 2008; Picciano, 2014; Porter, Graham, Bodily & Sandberg, 2016; Wang, Han & Yang, 2015). Interviewed participants who taught Science, Technology, and Mathematics based courses seemed to require the most on-campus meetings. For example, the chemistry course met once a week. Yet 75 percent of instruction was offered online. Therefore, one could imply that on-campus meetings did not predict the percentage of instructional delivery of on-campus or online portions of the course.

Participants discussed choosing a BL format due to concerns with academic integrity. Although this is a legitimate reason affecting all courses that use online assessment, there

are strategies and best practices available for addressing this issue. One such article that addressed this issue directly was Anderson's (2013) "Promoting Academic Integrity in Online Education" where strategies for reducing online cheating are given. A strategy offered in the article was "Use of multiple assessment techniques in place of high stakes exams" (p. 10). More recently software tools have been developed to address this issue such as Proctor U (2016). Proctor U monitors students while taking online exams. This could be another solution (2016).

Meeting the needs of the institution by providing BL courses seemed reasonable. However, as participants recommended, new BL instructors should have reviewed the inherited course design and delivery schedule, and should have sought peer recommendations and participated in professional development for BL teaching, course design and delivery prior to implementation. These practices would have provided a basis for a thorough review of the design and implementation plan making the course easier to manage.

The social aspect of learning was also discussed as a benefit of the BL environment. Chapter 2 discussed Garrison, Anderson and Archer's (2000) community of inquiry model. Social presence was defined as the degree to which a member within a community of inquiry was able to present his/her characteristics as an individual, adding this element acted to support cognitive presence. Most of the instructors reported positively about their extended communications and the social interactions with students in their BL courses. Therefore, a recommendation for instructors who were new to teaching BL courses would be to recognize and implement these concepts.

The outcome of the data analysis that provided the logical approach to implementing BL courses seemed acceptable. This process provided guidance to others who would consider developing BL courses, but further research should be conducted to ensure its value.

The perceived role of instructor was broad. While all instructors agreed that they moved into the role of facilitator or guide, they also reported their role expanded into other areas. The outcome of this data supplied the following implications: expecting students to seek assistance with technologies that you were using, developing the course was not the end of the time commitment required for teaching BL courses as more time would be required for managing the course and CC students needed more guidance in managing their time. Although it was implied that instructors needed to support students with the instructional technologies being used in the course, they also suggested that teaching BL courses only required average technology skills. Yet many self-reported having above average skills, liking technology and being able to teach themselves the technology that they needed to use. This finding was in agreement with Spotts (1999). As previously stated he reported instructors who ranked themselves with above average technology skill sets also believed using instructional technologies were more beneficial.

From these data an inferenced recommendation for those teaching a BL course for the first time would be try not to implement too many new technologies into the course design until you were comfortable teaching within this environment. And when teaching the BL course for the first time, plan on spending additional hours managing the course. Ocak's (2011) findings also included a higher level of time commitment for teaching BL courses.

To address the lack of opportunity for teaching BL courses, a recommendation would be to conduct a needs analysis of the student body to provide support for or against scheduling more BL courses at the institution. In addition, a needs analysis for the approval process to teach BL courses at the institution could be addressed.

Advertising and definition of BL courses was an issue that was also categorized under the administrative category. A plan to educate the counselors, instructors, administrators and students about what BL is, and how it works would benefit the community. This would also help address some of the reported classroom management issues. If students were informed about how BL works and what their personal learning responsibilities were in these classes prior to enrolling, it might improve their participation efforts. Or they might simply decide not to enroll in a BL course. Last, online student verification would be merged with academic integrity and those suggested solutions would apply.

Faculty embraced the BL environment for its flexibility, increased communications with students, social aspect of teaching and learning and the use of instructional technologies. Almost all would like to continue teaching in this environment.

Recommendations provided for new to BL instructors were: 1) attend professional development workshops; 2) avoid using textbook questions; 3) use engaging materials; 4) use relevant video and journal articles; 5) design the course carefully; 6) use reflective practice; 7) verify student technology skills; 8) assist students with time management; and 9) communicate with students regularly.

The definition of BL seemed to be an issue when communicating what BL is to the college community due to the fact that there were so many variations of how it is implemented. The standardization of BL within an institution would be a solution.

However, the very fact that BL is flexible is what makes it attractive for most CC faculty, but its nature also makes it allusive. This study should be reproduced and expanded to a broader audience in the future to explore whether these recommendations created any differences in the findings. This study focused on one case within one large community college. Further research should be done to document the CC faculty dispositions towards BL across institutions.

Summary

The problem that advanced this research was few studies addressed the faculty disposition regarding the implementation of blended learning courses and fewer addressed the community college faculty member's blended experience (Drysdale, Graham, Spring & Halverson, 2013; Halverson, Graham, Spring, Drysdale & Henrie, 2014; Helms, 2012). Most of the BL studies found within the literature were conducted within four-year colleges and universities (Halverson, et al., 2014; Helms, 2012). The goal was to understand the community college faculty member's dispositions towards blended learning. By gaining a deep and context-specific description of these faculty experiences, recommendations of best practices for implementing blended learning within the community college were developed for professional development curriculum. The overarching question was:

What is the disposition of community college faculty towards blended learning?

Subquestions included:

1. How do faculty describe blended learning?
2. How do faculty implement blended learning in the courses they teach?

3. How do faculty perceive their roles in the context of a blended learning course?
4. What problems do faculty face when implementing blended learning?
5. What aspects of blended learning do faculty embrace and why?

An extensive literature review was conducted in key areas that were relevant to exploratory case research bound to faculty dispositions for implementing blended learning within a community college setting. These areas included:

- the community college;
- a brief history of blended learning in higher education;
- definition of theory, framework, and model;
- theories and frameworks for distance education and blended learning;
- and faculty blended learning experience.

Individually, these key areas did not cover the vast experiences that explained the dispositions of BL CC faculty; but when combined they formed a cohesive representation. A qualitative exploratory case study was designed to explore the faculty member's experiences. It was comprehensive in scope, providing thorough distinct descriptions about the CC faculty BL experience.

Qualitative data were collected from the open-ended survey and semi-structured interview questions; observations were made during interviews, course outlines were collected, documentation on BL at SCCC was used, and archived demographical BL course data were collected from SCCC. Interviews were conducted with faculty members from Suffolk County Community College. The interviews took place at one of three SCCC campus locations.

Data analysis was performed using structural and descriptive coding methods (Saldaña, 2013). Two external reviewers edited and added codes to the initial code book based upon their individual analysis of the first transcript. Survey data that were demographic in nature were reported in tables. Interview questions were provided, themes and categories resultant from in-depth analyses of the participant's narratives conducted during one-on-one interviews to meet the purpose of the study were provided.

The findings of this survey included an ambiguous description of BL. All agreed that some portion of the course was taught online, the balance in the classroom. The description became unclear when they described the number of on-campus meetings, and the percentage of instruction delivered online and on-campus. Ten participants self-reported meeting once a week, while 13 reported meeting a specific number of times per semester. The range for percentage of instruction taught online was between 50 and 90 percent. Self-reported data showed 37.50 percent were full-time professors. The average number of BL courses taught per year was 1.4.

Interview findings showed faculty members were positive towards teaching blended learning courses. They liked the deep relationships that they formed with their students and enjoyed the flexibility that BL provided. It solved their problems with academic integrity. For some it did take time to develop a blend that worked at maximum efficiency. Many also reported appreciating the BL environment because it allowed for the integration and use of instructional technologies in their curriculums. Instructors also reported that when BL worked for students it was more rewarding than the traditional classroom because of the relationships that they formed with students.

What emerged from the data was a logical approach to use when implementing a BL course:

1) First decide why the course was being taught in a blended format;
2) upon identifying the why, then choose the number of on-campus meetings; next
3) define the percentage of instruction being delivered both on-campus and online; and

   finally concluded by,

4) choosing the online content, learning activities, and assessments based upon course learning outcomes.

One respondent also reported implementing reflective practice, changing the course structure after teaching the course to improve upon the blend.

The product of this research was CC faculty recommendations for best practices. They included:

1) attending professional development workshops;
2) avoiding use of textbook questions;
3) using engaging materials;
4) using relevant video and journal articles;
5) designing the course carefully;
6) using reflective practice;
7) verifying student technology skills;
8) assisting students with time management; and
9) communicating with students regularly.

While this study focused on one large community college with participants from three distinct college campuses, further research should be done to document the CC faculty dispositions towards BL across institutions.

Appendices

Appendix A: Survey Questions

Survey Questions

Hi my name is Robin Hill. I am the Coordinator of Instructional design here at SCCC. I am a doctoral student in the Graduate School of Computer and Information Sciences at Nova Southeastern University. The title of my dissertation is: "Community College Faculty Dispositions Towards Blended Learning." You are receiving this survey because you have been identified as someone who teaches or has taught in a blended learning environment.

The purpose of this survey is to gain insight into community college faculty dispositions towards blended learning. I realize that your schedule is busy and your time is valuable. However, I hope that the 10-15 minutes it will take to complete the survey will help lead to better understanding of faculty experiences with blended learning. By completing the survey, you are consenting to be part of this research study. Your responses will remain anonymous.

Demographic Questions

The demographic questions are designed to help determine what factors may possibly influence a participant's answers and opinions.

Please provide demographical information.

1. What is your gender? Radio button select one: M F
2. What is your age in years? ____ or prefer not to answer ☐
3. How many academic years have you been teaching at SCCC? _____
4. What is your faculty rank at SCCC: (Drop down list of the following: Adjunct, Instructor, Assistant Professor, Associate Professor, Professor).
5. What is your teaching content area? (Drop down list 32 departments)
6. What is your blended course campus assignment? Select all that apply: (Checkbox): ☐Ammerman ☐Grant ☐Eastern campus.
7. Did you receive training for teaching blended courses at SCCC? If yes, when? _____ And where? _____
8. In a typical academic year, how many blended/hybrid learning courses do you teach? ____ If zero the survey will branch to "Overall, how many blended courses have you taught during your tenure at SCCC? _____
9. How do you define blended/hybrid learning? Please elaborate. _____
10. What percentage of your blended/hybrid course is taught online? ___%.
11. How often does your blended/hybrid class meet on-campus in one semester? ____.

I am seeking faculty who are willing to participate in a 45 minute to 1 hour interview about their experiences in teaching in a blended learning environment. If you are willing to participate in an interview, please fill in the following information and you will be contacted to set-up an interview.

Name: _____ Email: _____

Preferred Phone Contact Number: ( ) ____-_____

Days and times you are available:

1st choice: Check one: ☐M ☐T ☐ W ☐Th ☐ F ☐ S Time: ___-___ ☐am / ☐pm

2nd choice: Check one: ☐M ☐T ☐ W ☐Th ☐ F ☐ S Time: ___-___ ☐am / ☐pm

Your preferred campus meeting location: Check one: ☐A ☐ G ☐ E

Thank you for completing this survey.

Appendix B: Nova Southeastern IRB Approval

NOVA SOUTHEASTERN UNIVERSITY
Institutional Review Board

MEMORANDUM

To: Robin Hill, EdS
Graduate School of Computer and Information Sciences

From: Cristina Garcia-Godoy, D.D.S., M.P.H., C.C.R.P. WH for Dr. Garcia-Godoy
2nd Vice Chair, Institutional Review Board

Date: July 15, 2015

Re: *Community College Faculty Dispositions towards Blended Learning* – NSU IRB No. 05141510Exp.

I have reviewed the revisions to the above-referenced research protocol by an expedited procedure. On behalf of the Institutional Review Board of Nova Southeastern University, *Community College Faculty Dispositions towards Blended Learning* is approved in keeping with expedited review category #6 and #7. Your study is approved on **July 14, 2015** and is approved until **July 13, 2016.** You are required to submit for continuing review by **June 13, 2015.** As principal investigator, you must adhere to the following requirements:

1) CONSENT: You must use the stamped (dated consent forms) attached when consenting subjects. The consent forms must indicate the approval and its date. The forms must be administered in such a manner that they are clearly understood by the subjects. The subjects must be given a copy of the signed consent document, and a copy must be placed with the subjects' confidential chart/file.

2) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair of any adverse reactions that may develop as a result of this study. Approval may be withdrawn if the problem is serious.

3) AMENDMENTS: Any changes in the study (e.g., procedures, consent forms, investigators, etc.) must be approved by the IRB prior to implementation.

4) CONTINUING REVIEWS: A continuing review (progress report) must be submitted by the continuing review date noted above. Please see the IRB web site for continuing review information.

5) FINAL REPORT: You are required to notify the IRB Office within 30 days of the conclusion of the research that the study has ended via the IRB Closing Report form.

The NSU IRB is in compliance with the requirements for the protection of human subjects prescribed in Part 46 of Title 45 of the Code of Federal Regulations (45 CFR 46) revised June 18, 1991.

Cc: Dr. Marti Snyder
Dr. Ling Wang
Mr. William Smith

3301 College Avenue • Fort Lauderdale, Florida 33314-7796
(954) 262-5369 • Fax: (954) 262-3977 • Email: *irb@nova.edu* • Web site: *www.nova.edu/irb*

Appendix C: Suffolk County Community College IRB Approval

Suffolk
COUNTY COMMUNITY COLLEGE
Institutional Review Board

August 24, 2015

To: Robin Hill
Coordinator of Instructional Design/Associate Professor
Suffolk County Community College
533 College Road
Selden, NY 11738

From: Christopher Shults, Ph.D.
Executive Director of Planning and Institutional Effectiveness
Chair, Institutional Review Board

Re: *Community College Faculty Dispositions towards Blended Learning*

Coordinator Hill,

After a review of the your authorization form and protocol, it was the decision of the Board that the study meets the criteria in 45 CFR 46.101(b)(2) for an IRB exemption. Please note the following information:

- **IRB# 15-011**
- **Expiration Date: N/A**

Given that this study meets the exemption criteria, the IRB does not require any follow up unless there are changes to the protocol or research study. If changes are made, note that they must be reported to the IRB immediately and that such changes may warrant a new review. Should you have any questions, feel free to contact me at (631) 451-4828.

Sincerely,

Christopher Shults, Ph.D.

Appendix D: Survey Invitation

Email to Expedite Survey (Participant Letter)

Hi my name is Robin Hill. I am the Coordinator of Instructional design here at SCCC. I am a doctoral student in the Graduate School of Computer and Information Sciences at Nova Southeastern University. The title of my dissertation is: "Community College Faculty Dispositions Towards Blended Learning." You are receiving this survey invitation because you have been identified as someone who teaches or has taught in a blended learning environment.

The purpose of this survey is to gain insight into community college faculty dispositions towards blended learning. I realize that your schedule is busy and your time is valuable. However, I hope that the 10 - 15 minutes it will take to complete the survey will help lead to better understanding of faculty experiences with blended learning. Participating in this survey is purely voluntary. By completing the survey, you are consenting to be part of this research study. Your responses will remain anonymous. Please click on the link to take the online survey, you may end the survey at any time by closing the browser window. Link to survey (link goes here).

For questions/concerns about your research rights, contact:
Human Research Oversight Board (Institutional Review Board or IRB)
Nova Southeastern University
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Planning and Institutional Effectiveness (Institutional Review Board or IRB)
Suffolk County Community College
631- 851-6750
ciampad@sunysuffolk.edu

Thank you for participating,

Robin A. Hill
Coordinator of Instructional Technology
Suffolk County Community College
631-451-4677

Appendix E: Semi-Structured Interview Questions

Semi-structured Interview Questions

1. What is your teaching content area?

2. How do you define blended/hybrid learning? Please elaborate.

3. In a typical academic year, how many blended learning courses do you teach? If zero ask "Overall, how many blended courses have you taught during your tenure at SCCC?

4. Which courses do you teach in a blended learning format? Is there any particular reason why you've chosen to teach these specific courses as blended?

5. What percentage of your blended/hybrid course is taught online?

6. How often does your blended/hybrid class meet on-campus in one semester? What reasoning did you use to determine the number of meetings in each environment?

7. What do you think about the degree of contact you have with your students when teaching a blended course?

8. How do you describe the role of "teacher" or "instructor" in a blended learning course? Please elaborate.

9. How do you feel about your interactions and connecting with students when teaching a blended learning course?

10. In your opinion, what level of technology knowledge is required for teaching a blended course? Please explain.

11. Describe your level of technology skill?

12. In your opinion, what, how and why does teaching blended learning courses work or not work? Please elaborate.

13. What recommendations would you give to other instructors who are considering teaching blended learning courses?

14. In your opinion, why does/doesn't blended learning work for community college students?

15. What experiences have contributed towards your choosing to teach in a blended learning format? If you choose not to teach in a blended learning course, please describe your experience(s) stating why you don't.

16. If questions arise during data analysis, would you be willing to participate in a second interview? ☐Yes ☐No

Appendix F: Informed Consent Form

NOVA SOUTHEASTERN UNIVERSITY
Graduate School of Computer and Information Sciences

NSU

NOVA Institutional Review Board
Approval Date: JUL 14 2015
Continuing Review Date: JUL 13 2016

Consent Form for Participation in the Research Study Community College Faculty Dispositions Towards Blended Learning

Funding Source: None.

IRB protocol #: 05141510Exp

Robin A. Hill Ed. S.
533 College Road
The Annex 101A
(631) 451-4677

Martha Snyder, Ph. D.
3301 College Ave
Fort Lauderdale, FL 33314
(954) 262-2074

For questions/concerns about your research rights, contact:
Human Research Oversight Board (Institutional Review Board or IRB)
Nova Southeastern University
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Planning and Institutional Effectiveness (Institutional Review Board or IRB)
Suffolk County Community College
631-451-4129
ciampad@sunysuffolk.edu

What is the study about?
The purpose of this study is to gain insight into community college faculty dispositions towards blended learning.

Why are you asking me?
You have been selected to participate because you are listed as teaching or having taught blended learning courses at SCCC.

What will I be doing if I agree to be in the study?
You will be asked to respond to 15 open-ended questions regarding your experiences with teaching blended learning courses at SCCC. The questions will be emailed to you prior to the interview. The interview will last for approximately 45-60 minutes.

Initials_____ Date _____ Page 1 of 3

Please be advised, if you have not taught blended learning courses at SCCC, then you will be excluded from the study.

Is there any audio or video recording?
This research project will include audio recording of the interview using a Sony digital recorder. This audio recording will be available to be heard by the researcher, the IRB and the following Dr. M. Snyder (dissertation chair). The recording will be transcribed by Robin A. Hill (researcher). The recording will be kept securely in a password protected database on the researcher's personal computer. The recording will be kept for 36 months and destroyed after that time. The files will be deleted. Because your voice will be potentially identifiable by anyone who hears the recording, your confidentiality for things you say (or do) on the recording cannot be guaranteed although the researcher will try to limit access to the tape as described in this paragraph.

What are the dangers to me?
The primary risk associated with the study is loss of confidentiality. To minimize this risk all identifiers such as participant names will be removed from the report. All interview recordings will be saved in a password protected data base where only the dissertation chair and the Internal Review Boards will be given access upon request. No names or data identifiers will be associated with any materials collected from the interview, survey or the individual syllabus.

If you have any questions about the research, your research rights, or have a research-related injury, please contact Robin A. Hill, or Dr. Snyder. You may also contact the IRB at the number indicated above with questions as to your research rights.

Are there any benefits for taking part in this research study?
There are no participant benefits associated with this study.

Will I get paid for being in the study? Will it cost me anything?
There are no costs to you or payments made for participating in this study.

How will you keep my information private?
All information obtained in this study is strictly confidential unless disclosure is required by law. The data collected will be stored in a password protected database on the researcher's personal computer. Please note the IRB, and the dissertation chair may review research records upon request.

What if I do not want to participate or I want to leave the study?
You have the right to leave this study at any time or refuse to participate. If you do decide to leave or you decide not to participate, you will not experience any penalty or loss of services you have a right to receive. If you choose to withdraw, any information collected about you **before** the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research.

Other Considerations:
If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the investigators.

Voluntary Consent by Participant:
By signing below, you indicate that

- **this study has been explained to you**
- **you have read this document or it has been read to you**
- **your questions about this research study have been answered**
- **you have been told that you may ask the researchers any study related questions in the future or contact them in the event of a research-related injury**
- **you have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights**
- **you are entitled to a copy of this form after you have read and signed it**
- **you voluntarily agree to participate in the study entitled "Community College Faculty Dispositions Towards Blended Learning."**

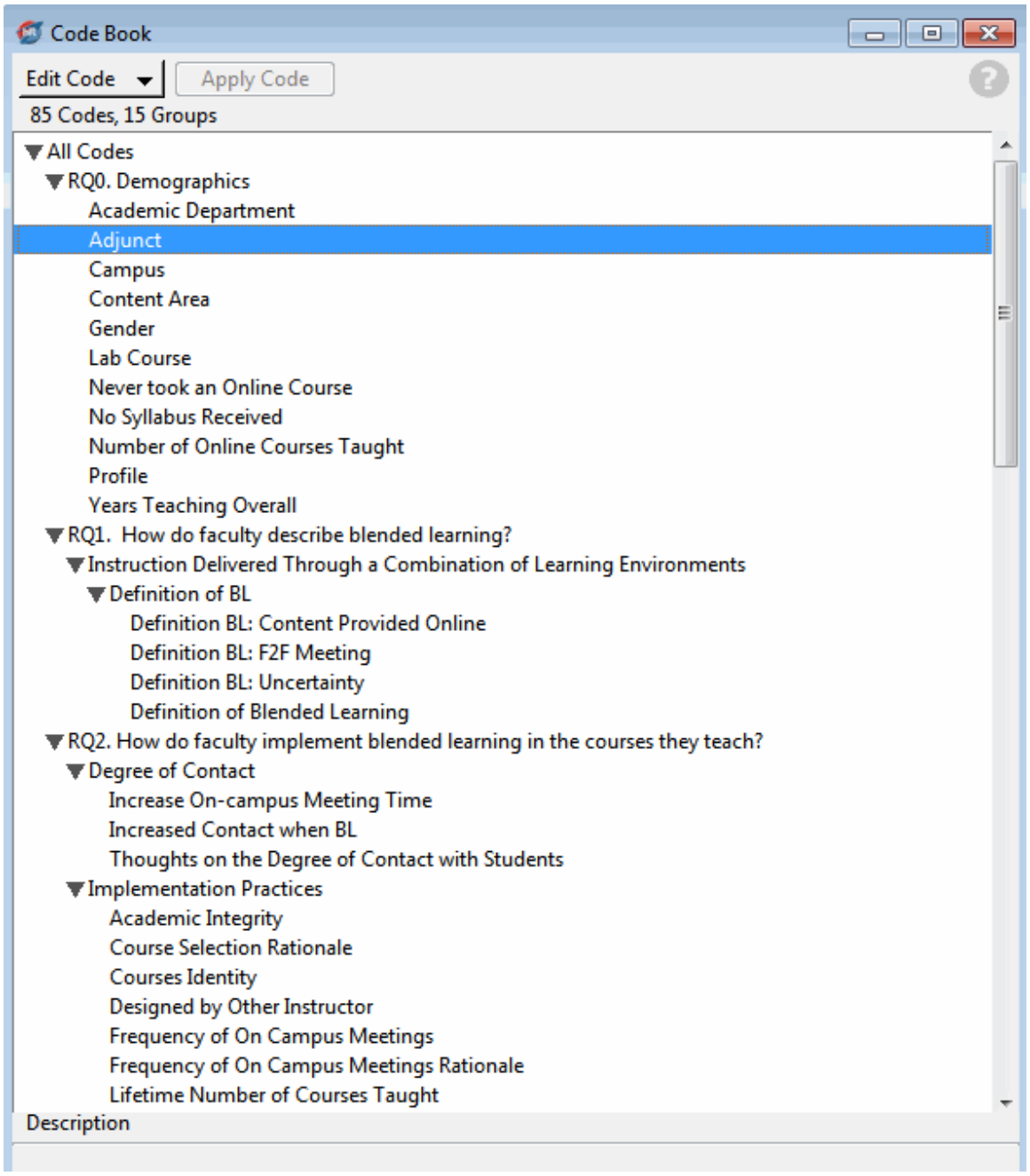
Before signing, please let me know if you have any questions or concerns regarding the study or this form.

Participant's Signature: _____ Date: _____

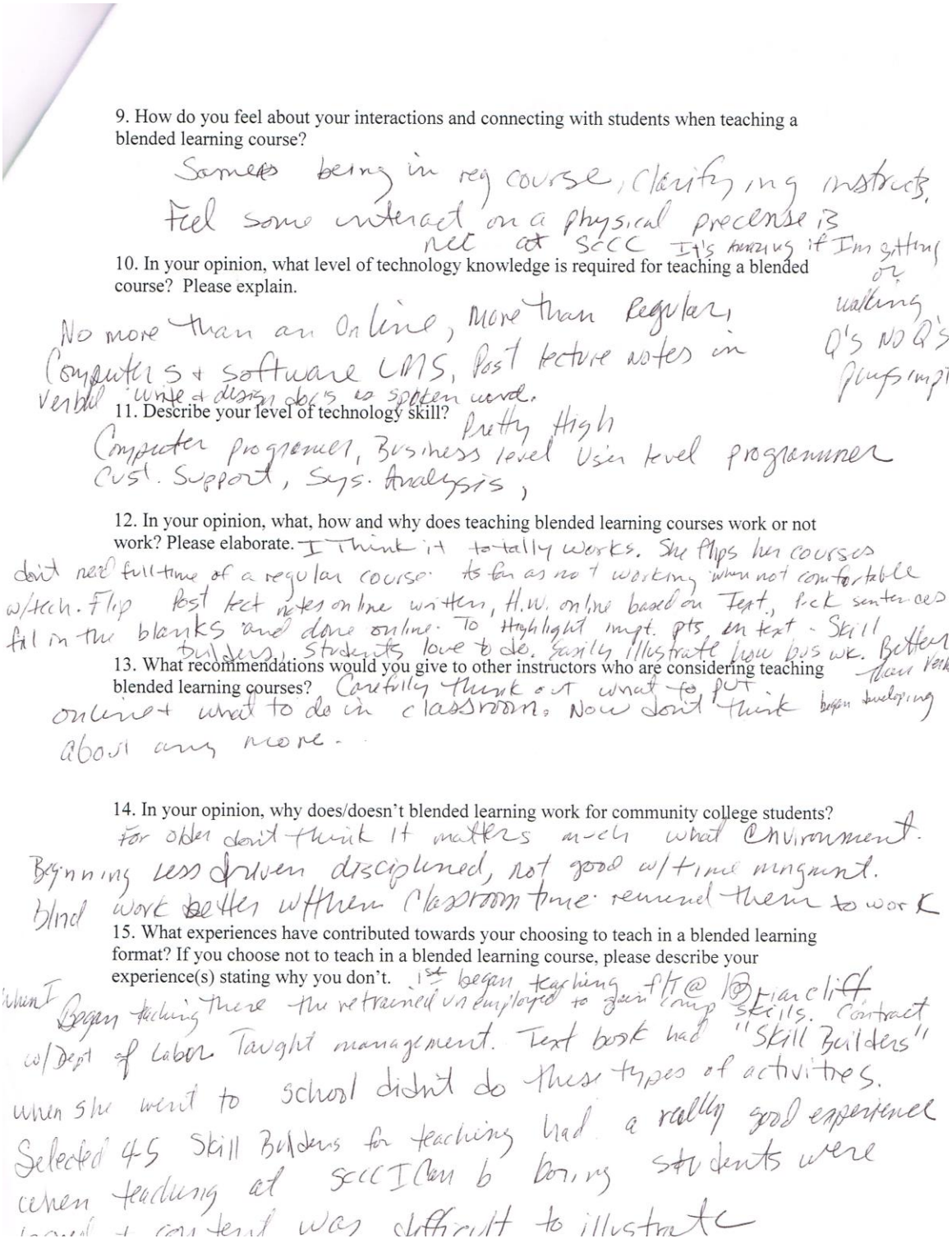
Participant's Name: _____ Date: _____

Signature of Person Obtaining Consent: _____ Date: _____

Appendix G: Code Guide



Appendix H: Field Notes



9. How do you feel about your interactions and connecting with students when teaching a blended learning course?

Sometimes being in reg course, clarifying instruct. feel some interact on a physical precense is not at SCCC It's amazing if Im getting or walking Q's NO Q's plus impl

10. In your opinion, what level of technology knowledge is required for teaching a blended course? Please explain.

No more than an Online, More than Regular, Computers + software LMS, Post lecture notes in Verbal write a discussion doc's as spoken word.

11. Describe your level of technology skill? Pretty High

Computer programmer, Business level User level programmer Cust. Support, Sys. Analysis,

12. In your opinion, what, how and why does teaching blended learning courses work or not work? Please elaborate. I Think it totally works. She flips her courses don't need full time of a regular course. Is fun as no 1 working when not comfortable w/tech. Flip Post lect notes online written, H.W. online based on Text, Pick sentences fill in the blanks and done online. To highlight impt. pts, in text - Skill builders. Students love to do. Easily Illustrate how bus wk. Better than work

13. What recommendations would you give to other instructors who are considering teaching blended learning courses? Carefully think out what to PUT online + what to do in classroom. Now don't think began developing about any more.

14. In your opinion, why does/doesn't blended learning work for community college students? For older don't think it matters much what Environment. Beginning less driven disciplined, not good w/time mngmnt. blnd work better w/them Classroom time: remind them to work

15. What experiences have contributed towards your choosing to teach in a blended learning format? If you choose not to teach in a blended learning course, please describe your experience(s) stating why you don't. 1st began teaching f/T @ Brancliff when I began teaching there the retrained unemployed to gain comp skills. Contract w/Dept of Labor Taught management. Text book had "Skill Builders" when she went to school didn't do these types of activities. Selected 45 Skill Builders for teaching had a really good experience when teaching at SCCC I can b boring students were [illegible] content was difficult to illustrate

Appendix I: Interviewed Participant's Self-Reported Data

Interviewed Participant's BL Environment Experiences

IP No.	Teaching Content Area	Number BL Taught per Year	Tenure Number BL Courses Taught	Percentage Taught Online	Number of Meetings On-campus	Number of Years Teaching at SCCC	Course Identity
1	Prefer not to say	0	2	80%	4	26	Prefer not to say
2	Business	2	N/A	50%	15	12	Bus 141
3	Mathematics	0	2	60%	15	20	MAT111
4	Biology	0	7	60%	15	20	BIO130
5	Computer Science	2	N/A	50%	15	17	CST101
6	Sociology	2	N/A	90%	3	2	SOC101
7	Nursing	2	N/A	80%	6	10	NUR103
8	Nursing	2	N/A	50%	7	8	NUR130
9	Chemistry	3	N/A	75%	15	3	CHM100
10	Mathematics	2	N/A	50%	15	5	MAT124

Note. $N = 10$.

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